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Situating Emotion: A Critical Realist View of Emotion and Nonconscious Cognitive Processes for Law and Legal Theory

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Situating Emotion: A Critical Realist View of Emotion and Nonconscious Cognitive Processes for Law and Legal Theory

*David J. Arkush**

This Article attempts to clarify legal thinking about emotion in decision making. It surveys evidence from psychology and neuroscience on the extensive role that emotion and related nonconscious cognitive processes play in human behavior, then evaluates the treatment of emotion in three legal views of decision making: rational choice theory, behavioral economics, and cultural cognition theory. The Article concludes that each theory is mistaken to treat emotion mostly as a decision objective rather than a part of the decision-making process and, indeed, to treat it as a force that mostly compromises that process. The Article introduces the view that emotion is a critical behavioral process that plays a role in most if not all decisions and is not readily amenable to accumulation or maximization. The Article discusses broad implications of this view for welfarist legal theory and policy generally and for an ongoing debate on risk regulation between behavioral economists and cultural cognition theorists. It also sketches potential applications in the law of employment discrimination, consumer protection, and criminal law.

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INTRODUCTION

In recent years, a revolution has begun in legal thinking on emotion in decision making. Rational choice theory, which holds that decision making is emotionless, has been swept by “behavioral economics,” which recognizes that many decisions are biased or flawed, often for emotional reasons. More recently, “cultural cognition theory” holds that emotion is rational and critical to decisions, positing that behavioral economics is mistaken to treat emotion as a distorting influence. This Article argues that each theory is unsatisfactory in light of empirical evidence on the role of emotion in decision making. The Article argues that the evidence supports a fundamental theoretical shift on emotion: treating emotion primarily as a *behavioral process* rather than an *object of decisions*. This shift has broad implications for law, legal theory, and policy in areas ranging from contract, tort, and criminal law to administrative regulation and the laws governing democratic process.

This Article is *situationist* in that it treats emotion not as an object of controlled thought and choices, but rather as one of many underappreciated factors that cause behavior.¹ This stance is dictated

1. See Jon D. Hanson & David Yosifon, *The Situation: A Critical Realist Perspective on the Human Animal*, 152 U. PA. L. REV. 129 (2003) [hereinafter Hanson & Yosifon, *Situation*]. Hanson and Yosifon adopted the term “situationism” from social psychology. In that field, “situationism” refers to the view that behavior is produced more by contextual factors and people’s attempts to respond to them (“the situation”) than by stable characteristics within people (“dispositions”). See, e.g., Linda Hamilton Krieger & Susan T. Fiske, *Behavioral Realism in Employment Discrimination and Law: Implicit Bias and Disparate Treatment*, 94 CAL. L. REV. 997, 1039–40 (2006). I read Hanson and Yosifon as treating stable personality characteristics, to the extent they exist, as part of the situation as well, deeming them part of people’s “interior situations,” in contrast to situational factors outside people’s bodies, which are “exterior situations.” See generally Jon Hanson & David Yosifon, *The Situational Character: A Critical Realist Perspective on the Human Animal*, 93 GEO. L.J. 1 (2004) [hereinafter Hanson & Yosifon, *Situational Character*].

by a methodological commitment to using the best available evidence on how humans think, feel, and behave, with the caveat that we must not overestimate our ability to attain knowledge untainted by politics and our own limitations—an approach Jon Hanson and David Yosifon have named *critical realism*.² The project of “situating emotion” is the critical-realist attempt to identify emotion’s role among the many factors that produce behavior.

Part I of this Article briefly introduces the dominant view of emotion in law, as reflected in rational choice theory and behavioral economics. Drawing heavily on evidence from social psychology and neuroscience, Part II discusses three major problems with this view, each of which derives from treating emotion as an object of decisions rather than a behavioral process. Part III introduces affirmative evidence for a different view of emotion that has received little attention in the legal literature: affect as the dominant biological process that drives behavior. Part IV evaluates rational choice theory, behavioral economics, and cultural cognition theory in light of the empirical evidence, concluding that each is incomplete, inaccurate, or incoherent. Part V outlines the view of emotion emerging from empirical evidence, argues that it compares favorably with other approaches, and sketches some implications of the view for law and legal theory.

I. A CONTRADICTION ON EMOTION

Rational choice theory has always contained an odd contradiction on emotion and reason.³ On the one hand, it treats emotion as undesirable and exceptional in decision making. On the

2. See Hanson & Yosifon, *Situation*, *supra* note 1, at 179–92. Jerry Kang and Mahzarin R. Banaji have similarly called for “behavioral realism.” Jerry Kang, *Trojan Horses of Race*, 118 HARV. L. REV. 1489, 1497 (2004). I take behavioral realism to share critical realism’s commitment to basing law and legal theory on the most realistic understanding of human behavior available. Hanson and Yosifon, however, have rightly emphasized that we should maintain “reservations about how ‘knowable’ our world is, about the existence of truly neutral, apolitical social sciences and legal doctrines, and about the independence of judges, scholars, and other reputedly neutral actors and institutions.” Hanson & Yosifon, *Situation*, *supra* note 1, at 182.

3. Despite its multi-decade prominence, “rational choice theory” lacks a settled definition. See, e.g., Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1060–64 (2000). I use the phrase to refer to expected utility theory, the most common form of rational choice theory, *id.* at 1062, as employed to make normative claims. Exemplars are Richard Posner, Louis Kaplow, and Steven Shavell.

other, it sets emotion as the principal (if not exclusive) goal of decisions. This tension is worth exploring because it illustrates the major flaw in mainstream views of emotion: treating emotion primarily as an *object* of decisions and failing to understand its role in the decision-making *process*.

A. Undesirable Emotion

Rational choice theory follows a long Western tradition of treating emotion primarily as negative influence. In this view, emotion is the opposite of reason, an untrustworthy force that cripples judgment.⁴ Thankfully, given its destructiveness, emotion is also rare, lasting only for brief states such as fear, rage, bliss, or a visceral craving.⁵ Aside from these occasional episodes, we are mostly emotionless decision makers.

More recently, authors in a school termed “behavioral economics” have discussed numerous “flaws” or “biases” in human rationality, many of which are emotional in nature.⁶ This represents less change from rational choice theory than appears at first glance. Like rational choice theorists, behavioral economists see emotion as a flaw that impairs proper—meaning “rational”—thought.⁷ Rational choice theory already accepted that emotions occasionally influence decisions; behavioral economics only expands the account of the frequency and means by which this happens.

4. See, e.g., George Loewenstein & Jennifer S. Lerner, *The Role of Affect in Decision Making*, in HANDBOOK OF AFFECTIVE SCIENCES 619, 620–21 (Davidson et al. eds., 2003); Jeremy A. Blumenthal, *Law and the Emotions: The Problems of Affective Forecasting*, 80 IND. L.J. 155, 159–60 & n.28 (2005) [hereinafter Blumenthal, *Affective Forecasting*]; Terry A. Maroney, *Law and Emotion: A Proposed Taxonomy of an Emerging Field*, 30 L. & HUM. BEHAV. 119 (2006).

5. See, e.g., George Loewenstein, *Out of Control: Visceral Influences on Human Behavior*, 65 ORG. BEHAV. & HUM. DECISION PROCESSES 272, 273 (1996) [hereinafter Loewenstein, *Out of Control*].

6. See *supra* text accompanying notes 1–3.

7. See, e.g., CASS R. SUNSTEIN, *THE LAWS OF FEAR* (2005) [hereinafter SUNSTEIN, *FEAR*]. This accords with their oft-professed aim of developing and enhancing rational choice theory rather than undermining it. See Korobkin & Ulen, *supra* note 3, at 1074–75; Tanina Rostain, *Educating Homo Economicus: Cautionary Notes on the New Behavioral Law and Economics Movement*, 34 L. & SOC'Y REV. 973, 974–75 (2000).

B. Crucial Emotion

Despite this apparent distaste for emotion in decision making, rational choice theorists and behavioral economists are committed to emotion when it goes by another name. They call this emotion “preferences,” “utility,” and “welfare.” Scholars have expended little effort defining these terms, but it is clear that they signify emotional well-being. For example, Louis Kaplow and Steven Shavell, who have written extensively on welfare, use “utility” and “welfare” to “refer to the well-being of an individual”⁸ and further define “well-being” as whatever pleases us minus whatever displeases us.⁹ The term “preferences” also signifies emotion because it is identical to “welfare”: welfare is the sum of satisfied preferences, and preferences are predictions of expected welfare.¹⁰ Thus, the terms refer to the same emotional objects of decisions at different phases of the decision-making process. Preferences are input-stage emotions that, once obtained, become output-stage utility or welfare.¹¹

C. Synthesis: The Emotionless Pursuit of Emotion

Thus, we see that the object of our mostly emotionless choices is, oddly, emotion: Rational choice theory holds that people choose, without emotion, outcomes that will generate positive emotion. Behavioral economists employ the same structure, varying only their recognition that many decisions are irrational for various reasons, one of which is the interference of emotion. Economists also reverse this equation to infer preferences: because people rationally choose the best means of satisfying their preferences, we can say that they desire the results of their actions—that their choices *reveal* their

8. Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 979 (2001); see also STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 595 (2004) (defining a person’s “utility” as an “indicator of his well-being, whatever might constitute that well-being”).

9. Kaplow & Shavell, *supra* note 8, at 980 (“[W]ell-being . . . incorporates in a positive way everything that an individual might value . . . [and] in a negative way harms to his or her person and property, costs and inconveniences, and anything else the individual might find distasteful.”).

10. A set of preferences is usually viewed as a state of the world or a bundle of goods. See *Preferences*, in STANFORD ENCYCLOPEDIA OF PHILOSOPHY (2006); Kaplow & Shavell, *supra* note 8, at 979 & n.33; see also SHAVELL, *supra* note 8, at 595 n.1.

11. Additionally, Kaplow and Shavell rely on work that expressly uses the term “emotion” to signify preferences and utility. Kaplow & Shavell, *supra* note 8, at 983 n.39 (citing JONATHAN BARON, MORALITY AND RATIONAL CHOICE 144 (1993)).

preferences.¹² Thus, policymakers can determine the value of goods and services and define welfare simply by watching what people do in well-working markets.

At a minimum, this approach suffers from internal tension. It assumes that emotion is mostly irrelevant or dangerous in decisions but that decisions reflect attempts to pursue emotion. Further, this approach assumes curiously that people perceive, evaluate, and pursue emotion without *feeling* it.¹³ The precise locus of tension is the hidden assumption that there are two types of emotion in decisions—emotion in the decision-making *process* and emotion as a decision *object*—and that the former is bad and the latter good. I argue below that this view is wholly mistaken, that emotion is critical to the decision-making process—sometimes helpful, sometimes harmful, but always necessary—and that welfare as commonly conceived is an illusory decision object. In short, the dominant view is backward.

II. PROBLEMS WITH VIEWING EMOTIONS AS OBJECTS

This Part discusses problems with viewing emotions as objects of decision making at each stage of the mainstream decision-making model: input (“preferences”), outcomes (“welfare”), and behavior (“choices”). First, however, let us make the discussion more concrete with a metaphor similar to one Shavell recommends. Imagine we each have a brain cavity that we can fill with utility chemicals—a well-being cup.¹⁴ At any given point in time, we have a certain quantity of chemicals in our cups, and we rank potential states of the

12. See, e.g., Amartya K. Sen, *Rational Fools: A Critique of the Behavioral Foundations of Economic Theory*, 6 PHIL. & PUB. AFF. 317, 322–23 (1977) (“If you are observed to choose x rejecting y , you are declared to have ‘revealed’ a preference for x over y The rationale of this approach seems to be based on the idea that the only way of understanding a person’s real preference is to examine his actual choices . . .”).

13. Also, its definition of “preferences” is circular. To ascertain preferences, we examine behavior and, to predict behavior, we look at preferences. See *id.* at 325. Another cause for concern is that many entities committed to influencing both our behavior and our perceptions of our behavior, primarily business interests, promote this theory even though they do not believe it. See generally Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation*, 74 N.Y.U. L. REV. 630 (1999) [hereinafter Hanson & Kysar, *TBS I*]; Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420 (1999) [hereinafter Hanson & Kysar, *TBS II*]; Hanson & Yosifon, *Situation*, *supra* note 1, at 160–61.

14. See SHAVELL, *supra* note 8, at 596 n.2.

world based on the chemicals they will provide us. These rankings are preferences. We then choose among world-states to maximize the amount of good chemicals that flow into our cups, and policymakers can tell what we value simply by looking in them. Finally, take the metaphor one step further, and imagine you are in a restaurant. Your utility chemicals go into a cup on the table rather than a brain cavity, and your potential preferences are on the drink menu. Now let us look at your preferences, choices, and welfare.

A. Problems with Preferences: Tap Water or Evian? Small or Tall?

1. Miswanting

The first problem with preferences is that many are mistaken—deeply mistaken. Much of what we seek and aspire to yields far less happiness than we imagine. In terms of the cup metaphor, we often discover that our drinks do not taste as we expected. Or they taste right, but we learn that we want something different than we thought. Or, for no apparent reason, the drinks simply do not please us as expected. Psychologist Dan Gilbert calls this phenomenon “miswanting.”¹⁵

Our relationship to money is probably the best-documented example of miswanting. Correlations between wealth and happiness vary somewhat from study-to-study,¹⁶ but one conclusion remains consistent: increased wealth or income provides little or no additional happiness to people who are not poor.¹⁷ Curves plotting well-being and annual income abruptly plateau above middle class levels.¹⁸ One recent study inferred that increasing happiness by one point on a ten-point scale would take at least an 800,000% increase

15. Daniel Gilbert & Timothy Wilson, *Miswanting: Some Problems in the Forecasting of Future Affective States*, in FEELING AND THINKING: THE ROLE OF AFFECT IN SOCIAL COGNITION 178 (Joseph P. Forgas ed., 2000). Others have discussed evidence of miswanting and other so-called “affective forecasting” problems in the legal literature. See Blumenthal, *Affective Forecasting*, *supra* note 4, at 163 & n.44; Hanson & Yosifon, *Situational Character*, *supra* note 1, at 118–19. I discuss the evidence thoroughly because it is relatively new to legal scholarship and because I integrate it into a holistic view of emotion.

16. Michael Argyle, *Causes & Correlates of Happiness*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 353, 356–58 (Kahneman et al. eds., 2003).

17. *Id.* at 358; David G. Myers, *The Funds, Friends, & Faith of Happy People*, 55 AM. PSYCHOL. 56, 59 (2000).

18. Argyle, *supra* note 16, at 356.

in income,¹⁹ and another found that although average national income in the United States grew from \$9000 to \$20,000 between 1957 and 1998, happiness declined slightly, from 35% to 33%.²⁰ Studies of national wealth and well-being also have found that the correlation between increased wealth and well-being disappears once national wealth grows above a relatively low floor—\$8000 gross national product per capita in one study²¹ and \$12,000 gross domestic product per capita in another.²²

Additionally, several studies suggest that wealth can correlate negatively with happiness.²³ Some researchers theorize that increased income or wealth may increase our focus on money at the expense of aspects of life that bring more happiness.²⁴ This may lead us to “misallocate” time, for example, by “accepting lengthy commutes (which are among the worst moments of the day)” or “sacrificing time spent socializing (which are among the best moments of the day).”²⁵ Some have even suggested that high income can focus attention on wealth in a pattern similar to drug addiction.²⁶

19. Ada Ferrer-i-Carbonell & Paul Frijters, *How Important Is Methodology for the Estimates of the Determinants of Happiness?*, 114 *ECON. J.* 641, 656 (2004). Another study suggests that the wealthiest people in the United States are at most only slightly happier than those with average incomes. Diener and his colleagues found that 49 people with incomes over \$10 million reported being happy 77% of the time whereas people with average incomes reported being happy 62% of the time. Ed Diener, Jeff Horwitz & Robert A. Emmons, *Happiness of the Very Wealthy*, 16 *SOC. INDICATORS RES.* 263, 263–74 (1985).

20. Myers, *supra* note 17, at 61. Similarly, a 500% increase in income in Japan between 1958 and 1987 did not increase reported happiness. Shane Frederick & George Loewenstein, *Hedonic Adaptation*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY* 302, 313 (Kahneman et al. eds., 2003); Daniel Kahneman et al., *Would You Be Happier If You Were Richer?*, 312 *SCI.* 1908, 1909 (2006).

21. Myers, *supra* note 17, at 59. (“Better so far as happiness and life satisfaction go to be Irish than Bulgarian. But whether one is Irish, Belgian, Norwegian, or American hardly matters.”).

22. Kahneman et al., *supra* note 20, at 1909. Although increased wealth correlates with greater happiness in poor countries, the correlation “is surprisingly weak (indeed, virtually negligible)” in the United States, Canada, and Europe. Myers, *supra* note 17, at 59; *see also id.* (“People who go to work in their overalls and on the bus are just as happy, on the average, as those in suits who drive to work in their own Mercedes.” (citing DAVID LYKKEN, *HAPPINESS: THE NATURE AND NURTURE OF JOY AND CONTENTMENT* 17 (Golden Books 1999))).

23. Mihaly Csikszentmihalyi, *If We Are So Rich, Why Aren't We Happy?*, 54 *AM. PSYCHOL.* 821 (1999).

24. Argyle, *supra* note 16, at 358; Csikszentmihalyi, *supra* note 23, at 823; Kahneman et al., *supra* note 20, at 1910. In general, people who score highly on measures of materialism are less happy than others. Argyle, *supra* note 16, at 358.

25. Kahneman et al., *supra* note 20, at 1910. Other research has suggested that people who value money highly are less happy because they are motivated by “social comparison,

This knowledge, to the extent it has been disseminated, has not extinguished our “preference” for increased wealth. Moreover, money is far from the only example of miswanting, and many are much more surprising. For example, although close relationships—particularly marriage and other close romantic relationships—are strongly correlated with happiness,²⁷ having children, a widespread voluntary human activity, has mixed effects at best²⁸ and may even diminish happiness.²⁹ Also, children appear to decrease marital happiness, which declines once they are born and begins to rise again when they start leaving the home.³⁰

Perhaps even more surprising, merely having choices can diminish happiness, and having fewer choices can increase happiness. In exemplary studies of this phenomenon, Dan Gilbert and Jane Ebert measured satisfaction with revocable and irrevocable choices regarding material possessions and found that participants were happier with objects they chose when the decisions were irrevocable.³¹ Such outcomes are obviously surprising. A majority of people reading the procedure for the former studies expressed a preference to be among those whose decisions were changeable.³²

seeking power, showing off, and overcoming self-doubt.” Abhishek Srivastava, Edwin A. Locke & Kathryn M. Bartol, *Money and Subjective Well-Being: It's Not the Money, It's the Motives*, 80 J. PERSONALITY & SOC. PSYCHOL. 959 (2001).

26. Csikszentmihalyi, *supra* note 23, at 823 (citing MICHAEL BENEDIKT, *VALUES* (Univ. of Texas Press 1999); STAFFAN LINDER, *THE HARRIED LEISURE CLASS* (Columbia Univ. Press 1970); TIBOR SCITOVSKY, *THE JOYLESS ECONOMY* (Random House 1975)).

27. Marriage likely increases happiness more than any other relationship. Argyle, *supra* note 16, at 359–62; Ferrer-i-Carbonell & Frijters, *supra* note 19, at 649; Myers, *supra* note 17, at 63. Of course, people must be happy with their marriages. Myers, *supra* note 17, at 62–63. Close relationships with other family, friends, coworkers, and fellow members of churches also are positively correlated with both happiness and better physical health. *Id.*

28. Argyle, *supra* note 16, at 360.

29. DANIEL GILBERT, *STUMBLING ON HAPPINESS* 220–21 (2006); Ferrer-i-Carbonell & Frijters, *supra* note 19, at 649.

30. GILBERT, *supra* note 29, at 220–21.

31. Daniel Gilbert & Jane E. J. Ebert, *Decisions & Revisions: The Affective Forecasting of Changeable Outcomes*, 82 J. PERSONALITY & SOC. PSYCHOL. 503 (2002). In one study, subjects chose one of two photographs they had taken. Half were allowed to change their minds within five days. Within two days, those whose decisions were irrevocable liked their photographs more than those permitted to change their minds, and this effect remained even after the opportunity to exchange photographs expired. A second study using art posters found similar results. *Id.* at 505–09.

32. *Id.* at 510–11; see also George Loewenstein, *Costs and Benefits of Health and Retirement-Related Choice*, in *SOCIAL SECURITY AND MEDICARE: INDIVIDUAL VS. COLLECTIVE RISK AND RESPONSIBILITY* (Sheila Burke, Eric Kingson & Uwe Reinhardt eds.,

We miswant in a variety of other circumstances as well, from trifles such as the next meal to major life decisions such as our career paths.³³ Psychologists have put forth compelling explanations for the phenomenon,³⁴ and neuroscientists have begun ascertaining its neural basis.³⁵ Those literatures are beyond the scope of this Article. Here, it suffices to say that many common conceptions of what makes us happy are surprisingly mistaken, and we regularly mispredict what will please us.³⁶ In terms of the metaphor, it is as if our drinks do not taste as expected or, when we receive them, we realize we want something else. Or it is as if one of our favorite beverages does not increase our happiness and, in fact, may even harm us. Imagine that.

2000) (arguing that choice is less desirable when it will not enhance competition, when it drains time, when people lack expertise and are prone to making poor decisions, and when people will face high levels of anxiety and regret about the choice); BARRY SCHWARTZ, *PARADOX OF CHOICE* (2005); Nicola J. Bawn, Daniel Read & Barbara Summers, *The Lure of Choice*, 16 J. BEHAV. DECISION MAKING 297 (2003). We may feel that some of these findings are obvious, but strong evidence suggests that they are not. Regarding wealth, for example, a 1984 Roper poll found that when “[a]sked how satisfied they were with 13 aspects of their lives, including friends, house, and schooling, Americans expressed least satisfaction with ‘the amount of money you have to live on.’” Myers, *supra* note 17, at 58. When asked in another survey what would improve their lives most, Americans’ most common answer was “more money.” *Id.* Another found that people who earned under \$30,000 per year reported needing \$50,000 in order to be happy, and people who earned over \$100,000 reported needing \$250,000. *Id.* In another, half of women, two-thirds of men, and four-fifths of people earning over \$75,000 said they would like to be rich. *Id.* We think we know that money does not buy happiness, but the evidence suggests otherwise.

33. Gilbert & Wilson, *supra* note 15, at 178–79; *see also* George Loewenstein & David Schkade, *Wouldn't It Be Nice? Predicting Future Feelings*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOL.* 85, 88 (Kahneman et al. eds., 2003).

34. Gilbert and Wilson identify several reasons for miswanting, but they are beyond the scope of this Article. *See* Gilbert & Wilson, *supra* note 15, at 179–83.

35. Kent Berridge, *Food Reward: Brain Substrates of Wanting and Liking*, 20 *NEUROSCIENCE & BIOBEHAVIORAL REV.* 1 (1996) (finding distinct brain structures in rats for “wanting” (being motivated to obtain something) and “liking” (pleasure)).

36. We should be careful not to overstate miswanting; we know what we want in many circumstances. Daniel Gilbert et al., *Immune Neglect: A Source of Durability Bias in Affective Forecasting*, 75 J. PERSONALITY & SOC. PSYCH. 617, 617 (1998) (“[M]ost people recognize that a weekend in Paris would be more enjoyable than gallbladder surgery, and few people fear chocolate or tingle in anticipation of next year’s telephone directory.”); Loewenstein & Schkade, *supra* note 33, at 99. The point remains, however, that we are often mistaken about what makes us happy in decisions large and small.

2. *Inconsistency & manipulability*

A second problem with preferences is that we cannot nail them down. Countless studies, discussed in the legal literature as “behavioral economics,” show that what we call preferences are often irrational and context-specific. Because these problems have been discussed widely,³⁷ I will not recount them in detail. The major points are simple: our preferences in a given situation can be altered in a variety of ways, for example by making certain options more salient than others,³⁸ rewording or reframing a choice without changing its actual content,³⁹ and so on.⁴⁰ In terms of the metaphor, it is as if the restaurant can influence our orders by altering the menu’s layout or terms, induce us to drink more or less by altering the size of our cups,⁴¹ and increase our patronization of the establishment by making us feel that the owner, even when a corporation rather than a human being, is a good citizen.

B. A Problem with Welfare: A Hole in the Bucket

Preference problems suggest that decisions are difficult because we often do not know what is good for us. But what about when we get it right? Unfortunately, even when we obtain positive welfare, it leaves us surprisingly quickly. (The silver lining is that bad emotions also fade quickly.) In a famous 1978 study, Brickman, Coates, and Janoff-Bulman found that neither winning the lottery nor becoming

37. See generally CASS SUNSTEIN, *BEHAVIORAL LAW & ECONOMICS* (2000) [hereinafter SUNSTEIN, *BEHAVIORAL LAW*].

38. This is the “availability heuristic.” See Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, in *JUDGMENT UNDER UNCERTAINTY* 163, 164 (1982).

39. Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 *STAN. L. REV.* 1471 (1998); Daniel Kahneman, *Reference Points, Anchors, Norms, and Mixed Feelings*, 51 *ORGIZATIONAL BEHAV. & HUM. DECISION PROCESSES* 296, 305–07 (1992); Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 271–73 (1979); Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 *SCI.* 453 (1981).

40. See generally SUNSTEIN, *BEHAVIORAL LAW*, *supra* note 37; Hanson & Kysar, *TBS I*, *supra* note 13; Hanson & Kysar, *TBS II*, *supra* note 13; Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 *VAND. L. REV.* 1499, 1503–06 (1998).

41. This is absolutely correct. See Brian Wansink, James E. Painter & Jill North, *Bottomless Bowls: Why Visual Cues of Portion Size May Influence Intake*, 13 *OBESITY RES.* 93 (2005).

permanently disabled affects happiness as much as we would expect after a short passage of time.⁴² The researchers compared self-ratings of happiness between people who had won \$50,000 to \$1,000,000 in the state lottery within the past year, people who had become paraplegic or quadriplegic within the past year, and a control group. When asked to estimate their happiness on a five-point scale, lottery winners averaged 4.00, whereas members of the control group averaged 3.82.⁴³ More surprisingly, people who became paraplegic or quadriplegic within the past year rated their happiness at 2.96, a level not terribly lower, and still solidly above the hypothetical neutral point of 2.50.⁴⁴ This was true even though participants rated the experience of *becoming* disabled 1.28.⁴⁵ The experience of *being* disabled was not nearly as bad as we might have expected. At a minimum, it was more happy than not.

The phenomenon of emotions fading quickly has been confirmed in a host of other circumstances, such as watching one's favorite team win or lose a game,⁴⁶ breaking up with a girlfriend or boyfriend,⁴⁷ watching one's preferred candidate lose an election,⁴⁸ gaining or failing to gain tenure at a major university,⁴⁹ being placed

42. Philip Brickman, Dan Coates & Ronnie Janoff-Bulman, *Lottery Winners and Accident Victims: Is Happiness Relative?*, 36 J. PERSONALITY & SOC. PSYCHOL. 917 (1978).

43. *Id.* at 920–21. The researchers later bolstered their findings by following up to ensure that the results were not distorted by factors such as preexisting differences in happiness between those who buy lottery tickets and those who do not. *Id.* at 921–23.

44. *Id.* at 920–21.

45. *Id.* at 920. Winning the lottery rated 3.78. *Id.* Later studies have reached similar conclusions. See generally Frederick & Loewenstein, *supra* note 20, at 312; Camile B. Wortman & Roxane C. Silver, *Coping with Irrevocable Loss*, in CATAclysms, Crises & Catastrophes: Psychology in Action 189, 197–99 (Gary R. VandenBos & Brenda K. Bryant eds., 1987); Richard Schulz & Susan Decker, *Long-Term Adjustment to Physical Disability: The Role of Social Support, Perceived Control, and Self-Blame*, 48 J. PERSONALITY & SOC. PSYCHOL. 1162, 1166–68, 1170–72 (1985). This is not to say that people suffering from serious injuries are not very unhappy at times; it is only to say that they are far less unhappy than expected. *Id.* at 198. Frederick and Loewenstein note that people do not adapt as well to chronic or progressive diseases, but this is probably because the progressive nature of such diseases continually presents new problems, making emotional adaptation more difficult. Frederick & Loewenstein, *supra* note 20, at 312.

46. Timothy D. Wilson et al., *Focalism: A Source of Durability Bias in Affective Forecasting*, 78 J. PERSONALITY & SOC. PSYCHOL. 821, 823–29 (2000).

47. Gilbert et al., *supra* note 36, at 620–22.

48. *Id.* at 624–26.

49. Gilbert and his colleagues surveyed all assistant professors and all former assistant professors in the College of Liberal Arts at the University of Texas at Austin between 1984 and 1994 who either had achieved tenure, or had been formally considered but failed to achieve it

in solitary confinement in prison,⁵⁰ losing a loved one⁵¹ (including a child),⁵² or learning that one has HIV⁵³ or cancer.⁵⁴ In each case, evidence suggests that people inaccurately predict the durability of changes in their happiness.⁵⁵

This evidence has led some to inquire whether we have something akin to a happiness or life-satisfaction set-point to which we eventually return after emotional events.⁵⁶ At a minimum, it

in any department other than psychology. Professors correctly predicted that the emotional impact of tenure decisions fades over time, but failed to predict how little tenure decisions affect short-term happiness and how quickly the effects fade. *Id.* at 622–24.

50. Prisoners seem to under-predict adaptation to solitary confinement. Loewenstein & Schkade, *supra* note 33, at 90. Studies on imprisonment generally suggest that although people have great initial emotional difficulty, they tend to adapt over time. However, well-being deteriorates again when release dates draw near, “presumably because [prisoners] begin to compare incarceration with the freedom they are beginning to anticipate.” Frederick & Loewenstein, *supra* note 20, at 311–12.

51. Eunkook Suh, Ed Diener & Frank Fujita, *Events and Subjective Well Being: Only Recent Events Matter*, 70 J. PERSONALITY & SOC. PSYCHOL. 1091, 1093–97 (1996) (conducting a study of recent college graduates).

52. Wortman and Silver interviewed approximately 125 parents who had lost an infant to sudden infant death syndrome (SIDS) three weeks, three months, and eighteen months afterward. At three weeks, negative feelings were hardly more prevalent than positive feelings. Within three months, positive feelings predominated, and within eighteen months, the frequency of positive feelings was not significantly different from that for people who had not lost a child. Also, it is not the case that people felt unhappy less frequently but more intensely; positive feelings were consistently more intense than negative feelings. *See* Wortman & Silver, *supra* note 45, at 199–201.

53. Elaine M. Sieff, Robyn M. Dawes & George Loewenstein, *Anticipated Versus Actual Reaction to HIV Test Results*, 112 AM. J. PSYCHOL. 297, 297 (1999).

54. Gilbert et al., *supra* note 36, at 618.

55. Loewenstein and Frederick found related results in a broad study on a long list of changes that people expect to impact their happiness: environmental changes (“levels of local air pollution, rain forest destruction, restriction of sport-fishing due to pollution, and recovery of certain endangered species”), social changes (“increase in number of coffee shops and cafés, increase in number of television channels and selection of videotapes, reduced risk of nuclear war, and increased risk of AIDS”), and personal changes (“change in free time, development of pain-causing chronic health condition, change in household income, and increase in body weight”). Loewenstein & Schkade, *supra* note 33, at 90. Of course there were some methodological problems with the study, as not every person surveyed experienced each circumstance predicted. However, “a clear general pattern emerged from the data.” *Id.* People usually overestimate the impact of a change but sometimes underestimate it. For example, researchers found in a 1982 study that people living near a new highway apparently overestimated their ability to adapt to highway noise. *Id.*

56. *See* Ed Diener & Richard E. Lucas, *Personality & Subjective Well-Being*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 213, 221–22 (Kahneman et al. eds.,

appears that sources of happiness should be classified into those that provide short-term, intermediate-term, and long-term benefits, with very few falling in the last category.⁵⁷ This means that many of our choices have little impact on our long-term happiness, and much of our worrying over them is misguided. The upside, of course, is that we can fear poor decisions less.⁵⁸

As with miswanting, I do not wish to overstate this phenomenon. However, it clearly exists and contributes to poor decisions in important instances. For example, people overestimate the impact of receiving bad news about health,⁵⁹ which can lead them to avoid medical testing when it would benefit them.⁶⁰ Similarly, people tend to over-predict the despair that terminal illness brings and to underestimate the quality of life of the disabled and

2003); Suh, Diener & Fujita, *supra* note 51, at 1095 (“Our findings support the [dynamic equilibrium] model’s prediction that SWB [subjective well-being] reverts to a level predetermined by individuals’ personality as soon as the pattern of life events regains its equilibrium. According to our findings, this regression process probably takes several months.”). One study surveyed over 2000 middle-aged identical twins and found that education, income, socioeconomic class, marital status, and religious commitment each accounted for at most three percent of variance in reported well-being. David Lykken & Auke Tellegen, *Happiness Is a Stochastic Phenomenon*, 7 PSYCHOL. SCI. 186 (1996). The most reliable predictor of one twin’s happiness was the other twin’s happiness. *Id.* at 189; *see also* DANIEL GOLEMAN, SOCIAL INTELLIGENCE 181–82 (2006) [hereinafter GOLEMAN, SOCIAL INTELLIGENCE] (citing Richard J. Davidson & William Irwin, *The Functional Neuroanatomy of Emotion and Affective Style*, 3 TRENDS IN COGNITIVE SCI. 11 (1999)); Ed Diener & Carol Diener, *Most People Are Happy*, 7 PSYCHOL. SCI. 181 (1996); Frank Fujita & Ed Diener, *Life Satisfaction Set Point: Stability and Change*, 88 J. PERSONALITY & SOC. PSYCHOL. 158 (2005); Richard E. Lucas et al., *Reexamining Adaptation and the Set Point Model of Happiness: Reactions to Changes in Marital Status*, 84 J. PERSONALITY & SOC. PSYCHOL. 527 (2003).

57. Fujita & Diener, *supra* note 56, at 162–163.

58. Many theories exist to explain why emotions fade quickly, but they are beyond the scope of this Article. *See generally* Frederick & Loewenstein, *supra* note 20; *see also* Kahneman, *Objective Happiness*, in WELL-BEING 3, 13–15 (Kahneman et al. eds., 1999); Philip Brickman & Donald T. Campbell, *Hedonic Relativism and Planning the Good Society*, in ADAPTATION-LEVEL THEORY: A SYMPOSIUM 287 (M. H. Appley ed., 1971); Brickman, Coates & Janoff-Bulman, *supra* note 42, at 918; Gilbert et al., *supra* note 36, at 619–20; Myers, *supra* note 17, at 60; Wilson et al., *supra* note 46, at 822–23.

59. *See, e.g.*, Loewenstein & Schkade, *supra* note 33, at 91 (finding that people “do not seem extremely adversely affected when they” learn that they have or are at increased risk of having Huntington’s disease, though many resist being tested); Sieff, Dawes & Loewenstein, *supra* note 53, at 307 (finding “anticipated distress” higher than “reported distress” among people who test positive for HIV).

60. Loewenstein & Schkade, *supra* note 33, at 91; Sieff, Dawes & Loewenstein, *supra* note 53, at 297.

infirm.⁶¹ Thus, they may make poor decisions regarding living wills⁶² and the value of medical procedures for the terminally ill.⁶³

Thus, positive and negative welfare states tend to be unexpectedly transitory, making it difficult for us to make accurate decisions about maintaining or avoiding them. Returning to the metaphor, it is as if our cups are actually sieves—or as if no matter what or how much we drink today, our stomachs will be empty tomorrow.

C. A Problem with Choice: Water Under the Bridge

Now we turn to “choices,” which suffer problems of their own. Even when we know what we want, and even if we knew how to keep it, we have difficulty executing our plans. Examples abound of our making decisions contrary to our expressed desires. Classic examples include overeating, drug use, and gambling,⁶⁴ but these are only the most obvious situations in which we act against our better judgment.

Many social psychologists place cognitions on a continuum between “cold” (relatively uninfluenced by emotion or other non-conscious processes) and “hot” (characterized by greater emotional arousal and influenced more heavily, or even controlled by, emotion or other nonconscious processes).⁶⁵ Economist George Loewenstein, who has extensively researched people’s views and actions under hot and cold conditions, observed that people in cooler states of mind have difficulty predicting how they will act under the influence of “*visceral factors* such as the cravings associated with drug addiction,

61. Glenn Affleck & Howard Tennen, *Construing Benefits from Adversity: Adaptational Significance and Dispositional Underpinnings*, 64 J. PERSONALITY 899, 901–02 (1996); Loewenstein & Schkade, *supra* note 33, at 92 (citing Gina Kolata, *Living Wills Aside Dying Cling to Hope*, N.Y. TIMES, Jan. 15, 1997, at C10).

62. One study of 4804 terminally ill patients found that 688 had living wills, but those patients sometimes changed their minds when near death. One of the researchers, a doctor, commented: “Over and over again, they would say, ‘I’ve got a living will, but I’m not sick enough yet.’” Gina Kolata, *Documents Like Living Wills are Rarely of Aid, Study Says*, N.Y. TIMES, Apr. 8, 1997, at A12.

63. *Id.* at C10.

64. A 2000 survey of 2630 Americans found that 82% percent had participated in some form of gambling in the past year. See John W. Welte et al., *Gambling Participation in the U.S.—Results from a National Survey*, 18 J. GAMBLING STUD. 313, 313, 316, 324 (2004). Sixty-six percent played the lottery at least once in the past year, 13% played weekly, and 27% had gambled in a casino at least once. *Id.* at 318–19, 324.

65. See ZIVA KUNDA, SOCIAL COGNITION: MAKING SENSE OF PEOPLE 212–63 (1999).

drive states (for example, hunger, thirst, and sexual desire), moods and emotions, and physical pain.”⁶⁶ Likewise, people in warmer states of mind tend to overestimate the likelihood that people in cooler states of mind will act as they do. Loewenstein calls this discrepancy an *empathy gap*,⁶⁷ meaning that the “cold” and “hot” versions of our selves cannot empathize adequately with one another. Loewenstein notes that strong visceral urges such as hunger, thirst, sexual arousal, and pain “have the ability to change us so profoundly that we’re more different from ourselves in different states than we are from another person.”⁶⁸

Several kinds of studies provide evidence of empathy gaps. Some evidence stems from people’s predictions of their own behavior—in particular, comparing the predictions that people in hot or cold states make about their behavior in hot situations. These studies show that people predict that they will act more emotionally in the future if they are currently in a state of emotional arousal.⁶⁹ Other evidence stems from people’s predictions of others’ behavior, in

66. Loewenstein, *Out of Control*, *supra* note 5, at 272; *see also* George Loewenstein, Daniel Nagin & Raymond Paternoster, *The Effect of Sexual Arousal on Expectations of Sexual Forcefulness*, 34 J. RES. CRIME & DELINQ. 443, 445 (1997) (“When not hungry, afraid, angry, or sexually aroused, people seem to have trouble imagining how they would feel, or how they might act, when they experience these states.”). Loewenstein makes clear that he is speaking only of a requisite intensity of emotional “warmth”: “*At sufficient levels of intensity*, these, and most other visceral factors, cause people to behave contrary to their own long-term self-interest, often with full awareness that they are doing so.” Loewenstein, *Out of Control*, *supra* note 5, at 272–73 (emphasis added). He later adds, “at even greater levels of intensity, visceral factors can be so powerful as to virtually preclude decision making.” *Id.* at 273.

67. Loewenstein, Nagin & Paternoster, *supra* note 66, at 445.

68. Jon Gertner, *The Futile Pursuit of Happiness*, N.Y. TIMES MAG., Sept. 7, 2003, at 44, 86.

69. A study examined the impact of sexual arousal on male college students’ predictions of their own sexual aggression. Loewenstein, Nagin & Paternoster, *supra* note 66. Researchers used a pre-textual picture-viewing activity to induce arousal in some subjects, but not others. *Id.* at 448–51. Subjects then read a story written in the second person about meeting a female student, “Susan,” who has a reputation for promiscuity, in a bar, returning to her apartment with her, and engaging in kissing and heavy petting. *Id.* at 450. The story stops when “you” [the subject] attempt to remove Susan’s clothing and she “tells you that she thinks that she is not interested in having sex but does not try to physically stop you.” *Id.* Subjects were then asked to predict the likelihood that they would (1) try to coax Susan to let them remove her clothes, and (2) “have sex with her even if she protested.” *Id.* Students who were sexually aroused in advance of reading the story predicted a substantially higher likelihood they would try to coax Susan to remove her clothes. *Id.* at 455–56.

which people in emotional states predict that others will act emotionally.⁷⁰

If predictions of behavior vary with emotional states, it seems likely that behavior does as well. However, these studies do not examine actual behavior and cannot draw the link completely.⁷¹ Others have. For example, Ron Gold approached roughly 700 gay men in bars and inquired whether they had engaged in unprotected anal intercourse in the past six months and, in doing so, had broken their own safe-sex rules. Between one-quarter and one-third of the men answered affirmatively.⁷² Furthermore, 138 of the men agreed to participate in a study on the effectiveness of various forms of safe sex educational materials, keeping diaries for sixteen weeks while receiving various sex education materials. At the outset of the study, 34% reported having engaged in unprotected anal sex with one partner in the past six months, 33% reported having done so with two partners, and 33% reported having done so with more than two partners. Remarkably, 64% of the men reported having broken their own rules during the study, some more than once, even while keeping sexual diaries for researchers.⁷³

Finally, numerous studies have found evidence of empathy gaps through direct comparison of predictions or plans with subsequent behavior. For example, a majority of pregnant women who intend to decline anesthesia during childbirth change their minds during labor,

70. For example, in the study of sexual arousal and aggression, participants in the arousal group also rated *other students* as more likely to behave aggressively with Susan. This effect was much less dramatic however. *Id.* at 464–65. Loewenstein and Van Boven examined this phenomenon more directly in a study involving the impact of thirst on participants' predictions of others' behavior. Leaf Van Boven & George Loewenstein, *Social Projection of Transient Drive States*, 29 PERSONALITY & SOC. PSYCHOL. BULL. 1159 (2003). Subjects read a narrative in which hikers become hopelessly lost without food or water and were asked to predict their own and the hikers' hunger and thirst in the situation. Half the participants had exercised vigorously for twenty minutes before reading the story and answering questions. They were warmer and thirstier, but no hungrier, than other participants. Those who had just exercised were more likely than others to predict that they and the hikers would be more thirsty than hungry, and they more frequently predicted regrets about not having packed extra water than extra food. Furthermore, only people who exercised *and felt thirsty* predicted significantly more thirst; those who had exercised but did not report feeling particularly thirsty did not predict more thirst. *Id.* at 1163–65.

71. See Loewenstein, Nagin & Paternoster, *supra* note 66, at 465–67.

72. Ron Gold, *Why We Need to Rethink AIDS Education for Gay Men*, 7 AIDS CARE S11 (1995). In another study, 51% of 79 gay men approached in a bar reported having engaged in UAI in the past six months. *Id.*

73. *Id.* Only 109 of the men completed the study. *Id.*

even among women who have previously given birth.⁷⁴ Military trainees overestimate the fear they will feel in parachuting.⁷⁵ Even casual smokers overestimate the likelihood they will quit smoking within five years.⁷⁶ Hungry grocery shoppers make more unplanned food purchases than non-hungry shoppers unless they guide their decisions with grocery lists.⁷⁷ People overestimate the pain they will feel at the dentist⁷⁸ and famously underestimate their willingness to deliver painful electric shocks to others when pressured by researchers—even when they are aware at the time of the prediction that most people succumb to such pressure.⁷⁹ People also underestimate the extent to which objects they obtain will suddenly become more valuable to them—known as the endowment effect—even when they know they may soon possess an object.⁸⁰ They also underestimate the influence of curiosity on their choices,⁸¹ their willingness to accept minor embarrassments in exchange for money,⁸² their ability to maintain zero balances on credit cards,⁸³ and their likelihood of mailing in rebate forms.⁸⁴

74. Loewenstein & Schkade, *supra* note 33, at 91.

75. *Id.*

76. *Id.* at 93 (citing B.S. LYNCH & R.J. BONNIE, *Toward a Youth-Centered Prevention Policy*, in *GROWING UP TOBACCO-FREE: PREVENTING NICOTINE ADDICTION IN CHILDREN AND YOUTHS 3–25* (B.S. Lynch & R.J. Bonnie eds., 1994)); *see also* Loewenstein, *Out of Control*, *supra* note 5, at 286.

77. Daniel T. Gilbert, Michael J. Gill & Timothy D. Wilson, *The Future Is Now: Temporal Correction in Affective Forecasting*, 88 *ORG. BEHAV. & HUM. DECISION PROCESSES* 430, 439 (2002).

78. Loewenstein & Schkade, *supra* note 33, at 91 (citing Gerry Kent, *Memory of Dental Pain*, 21 *PAIN* 187–94 (1985)). Note that people do not always mispredict pain. Studies have found that people can fairly accurately predict their “utility” after radiation therapy and that people who frequently experience headaches can accurately predict the pain of future headaches. *See id.*

79. *Id.* at 93 (citing STANLEY MILGRAM, *OBEDIENCE TO AUTHORITY* (1965)).

80. George Loewenstein & Daniel Adler, *A Bias in the Prediction of Tastes*, 105 *ECON. J.* 929, 929 (1995) (“The endowment effect refers to the tendency for people to value an object more highly if they possess it than they would value the same object if they did not.”); Leaf Van Boven, David Dunning & George Loewenstein, *Egocentric Empathy Gaps Between Owners and Buyers: Misperceptions of the Endowment Effect*, 79 *J. PERSONALITY & SOC. PSYCHOL.* 66–76 (2000) [hereinafter Van Boven et al., *Empathy Gaps*]; Leaf Van Boven, George Loewenstein & David Dunning, *Mispredicting the Endowment Effect: Underestimation of Owners’ Selling Prices by “Buyer’s Agents,”* 51 *J. ECON. BEHAV. & ORG.* 351 (2003).

81. Loewenstein & Schkade, *supra* note 33, at 93–94.

82. Leaf Van Boven, George Loewenstein & David Dunning, *The Illusion of Courage in Social Predictions: Underestimating the Impact of Fear of Embarrassment on Other People*, 96 *ORG. BEHAV. & HUM. DECISION PROCESSES* 130, 132 (2005) (citing Leaf Van Boven et al.,

Loewenstein recalls a friend's story of a flight during which the airplane suddenly dived, and only half the oxygen masks dropped from the cabin ceiling. In a panic, some people grabbed the masks of children next to them.⁸⁵ Few of us would predict acting so selfishly or unfairly. But apparently this is only because we cannot adequately empathize with the fear we would feel in a falling airplane and the influence of that fear on our behavior.⁸⁶ In terms of the cup metaphor, it is as if even when we know what we should order, we sometimes fail to do it. We order soda instead of water, or drink two glasses of wine instead of one.

D. A Problem for the Model: Poor Service

Most discussions of the above problems treat them implicitly or explicitly as informational issues, illustrations of "bounded rationality."⁸⁷ In this view, "empathy gaps" and "affective forecasting" errors are instances of insufficient knowledge about our future feelings and behavior. The hope of this approach, albeit sometimes implicit, is to provide better information so that we can make better decisions or to design policies that will help us do so. If we learn what makes us happy and what does not, we can change our pursuits.⁸⁸ And if we ascertain the emotional situations in which we fail to behave as planned, we can avoid or remake them.⁸⁹

This approach is commendable to a point. It resonates with our experience of learning about ourselves and attempting to change our behavior, and we certainly need better information to make better

The Illusion of Courage in Self Predictions: Underestimating the Impact of Fear of Embarrassment on the Self (unpublished manuscript, University of Colorado, Boulder).

83. See Lawrence M. Ausubel, *The Failure of Competition in the Credit Card Market*, 81 AM. ECON. REV. 50, 70-72 (1991) (finding that 75% of consumers carry balances although 47% report that they "nearly always pay in full").

84. Loewenstein & Adler, *supra* note 80, at 929 (citing P. Tat, W.A. Cunningham & E. Babakus, *Consumer Perceptions of Rebates*, 28 J. ADVERTISING RES. 45-50 (1988)).

85. Loewenstein, *Out of Control*, *supra* note 5, at 284.

86. Note that Loewenstein also recognizes the much more extensive influence of emotion and automatic processes that this Article highlights. See *id.*

87. See GILBERT, *supra* note 29, at 238 ("Yes, we *should* make choices by multiplying probabilities and utilities, but how can we possibly do this if we can't estimate those utilities beforehand?"); Loewenstein & Adler, *supra* note 80; Rostain, *supra* note 7.

88. Kaplow and Shavell, for example, deem these problems "mistaken preferences," which result from information problems. Kaplow & Shavell, *supra* note 8, at 984, 1331-32.

89. See, e.g., Eric A. Posner, *Law and the Emotions*, 89 GEO. L.J. 1977, 1978 (2001).

decisions. But it is inadequate. First, it diverts our attention from important questions. For example, research on “durability bias” primarily concerns not the tendency of emotions to fade rapidly, but rather whether individuals are aware of this fact and account for it in decisions—the implication being that it is just another blind spot or bias in decision making.⁹⁰ But the potential problem of choices having little influence on our long-term happiness is at least as pressing as the question whether we *know* about this. Similarly, research on empathy gaps focuses on whether we can predict our behavior accurately.⁹¹ The question is important, but it distracts us from more difficult questions such as why we have poor self-control and what we can do about it. Moreover, merely knowing about these phenomena may not help us much. Researchers in these areas have little confidence that more or better information results in better decisions.⁹²

This point brings us to the more fundamental problem with the information model. It proposes to remedy poor thinking, planning, and self-control with more thinking, planning, and self-control. It also requires that we constantly make decisions about how to make decisions—when to calculate more elaborately and deliberatively, when to use approximations and heuristics, when to settle for something less than the best, and so on.⁹³ A problem that has been lurking throughout this discussion finally comes to the forefront: who has time for even a small fraction of all this reasoning?

Numerous scholars have noted, particularly when discussing heuristics and biases, that people cannot and do not consciously

90. Gilbert et al., *supra* note 36, at 617.

91. Van Boven et al., *Empathy Gaps*, *supra* note 80, at 66.

92. Gilbert expresses little hope, stating that “the information we need to make accurate predictions of our emotional futures is right under our noses, but we don’t seem to recognize its aroma.” GILBERT, *supra* note 29, at 233. He offers only that we can understand the reasons we fail. *Id.* at 238.

93. For example, Sen once proposed adding to ordinary preferences several other sets, including “meta-rankings” of preferences. Sen, *supra* note 12, at 336–39. Meta-rankings could be used to “express[] what preferences one would have preferred to have” or “to analyze the conflicts involved in addiction.” *Id.* at 339; *see also* Korobkin & Ulen, *supra* note 3, at 1077–78 (“Even if a choice is not too complex for an actor to process physically, she might choose to limit her search for information or consideration of the decision short of reaching a utility-maximizing decision. The decision to adopt a simplified strategy might be sensible given the marginal benefits and costs of making an optimal decision relative to a satisfactory one . . .”).

control everything they do,⁹⁴ and that people are “cognitive misers” who use mental resources sparingly.⁹⁵ We often fail to consider judgments carefully unless alerted to the possibility that our decisions may be flawed,⁹⁶ and even basic acts of self-control occupy such a great proportion of cognitive resources that they must occur rarely.⁹⁷ Such limitations led economists to propose long ago that people engage in “satisficing” rather than “maximizing” behavior, intentionally aiming for less than utility maximization because of the difficulty in achieving it.⁹⁸ Yet despite this recognition that people cannot consider and make choices about all their actions, few legal scholars have grappled seriously with how people get through their lives without doing so, and what that means for law and legal

94. See Loewenstein & Lerner, *supra* note 4; John A. Bargh & Tanya L. Chartrand, *The Unbearable Automaticity of Being*, 54 AM. PSYCHOLOGIST 462, 464 (1999) (“Tice and Baumeister concluded after their series of eight such experiments that because even minor acts of self-control, such as making a simple choice, use up this limited self-regulatory resource, such conscious acts of self-regulation can occur only rarely in the course of one’s day. Even as they were defending the importance of the conscious self for guiding behavior, Baumeister et al. . . . concluded it plays a causal role only 5% or so of the time.”). One illustration of the limits of conscious cognition is the contrast in our nonconscious and conscious processing powers. Our senses can process around eleven million bits of information per second, but we can process at most fifty bits per second consciously. See Ap Dijksterhuis, Henk Aarts & Pamela K. Smith, *The Power of the Subliminal: On Subliminal Persuasion and Other Potential Applications*, in THE NEW UNCONSCIOUS 77, 82 (Ran R. Hassin, James S. Uleman & John A. Bargh eds., 2005).

95. See John A. Bargh, *The Cognitive Monster: The Case Against the Controllability of Automatic Stereotype Effects*, in DUAL-PROCESS THEORIES IN SOCIAL PSYCHOLOGY 361, 362 (Shelly Chaiken & Yaacov Trope eds., 1999); Hanson & Yosifon, *Situational Character*, *supra* note 1, at 23 & n.72. The term “cognitive miser” was coined by social psychologists Shelley Taylor and Susan Fiske in 1978. John A. Bargh, *Social Psychological Approaches to Consciousness*, in THE CAMBRIDGE HANDBOOK OF CONSCIOUSNESS 556 (P. Zelazo, M. Moscovitch & E. Thompson eds., 2007) [hereinafter Bargh, *Consciousness*] (citing Shelley Taylor & Susan Fiske, *Salience, Attention, and Attribution: Top of the Head Phenomena*, in ADVANCES IN EXPERIMENTAL PSYCHOLOGY 249 (L. Berkowitz ed., 1978)).

96. Daniel T. Gilbert & Michael J. Gill, *The Momentary Realist*, 11 PSYCHOL. SCI. 394 (2000).

97. For example, the ability to persist in attempting to solve puzzles is seriously diminished when people are asked to resist eating cookies placed in front of them, to choose between two options, to try not to think about something particular, or to restrain emotional responses to movies. See Bargh & Chartrand, *supra* note 94, at 465; Roy F. Baumeister et al., *Ego Depletion: Is the Active Self a Limited Resource?*, 74 J. PERSONALITY & SOC. PSYCHOL. 1252 (1998).

98. See Korobkin & Ulen, *supra* note 3, at 1075–76 & n.81 (citing Herbert A. Simon, *Rational Choice and the Structure of the Environment*, in MODELS OF MAN: SOCIAL AND RATIONAL 261, 270–71 (1957)).

theory.⁹⁹ Rational choice theory has no answer,¹⁰⁰ and behavioral economics provides only a piecemeal, situation-specific approach of acknowledging various exceptions to the basic model.¹⁰¹

Fortunately, psychologists and neurobiologists have begun finding an explanation, and it has much to do with emotion. Rather than mere objects amenable to evaluation, prediction, and stockpiling, emotions are ever-shifting processes that steer our interactions with the environment. “Preferences” are a misnomer for context-specific affective processes that sometimes have nothing to do with long-term (or even short-term) well-being. “Choices” are behavioral manifestations of those processes. And emotion’s nature as a process explains why “welfare” gains are fleeting. In the following section, I review evidence for these points.

III. A NAVIGATION SYSTEM FOR HOMO ECONOMICUS

Over the past few decades, the mainstream of social psychology has moved away from the assumption that humans are aware of and control most of their thought and behavior. Contemporary researchers subscribe to various dual-processing models of cognition and behavior, which hold that behavior is produced by both intentional, conscious, “explicit” thought and unintentional, nonconscious, “implicit” thought.¹⁰² Emotions are a large part of this story because they modulate most cognitive and behavioral processes and, indeed, appear to be critical to decisions.

Mounting evidence shows that emotions can operate independently of, and precede, conscious or reasoned thought and that nonconscious processing is vital to behavior. Just as we use computers and other devices to automate certain tasks—from autopilot devices in airplanes to voice mail for telephones—our

99. The important exception is Jon Hanson, who has followed social psychologists in arguing for years that much behavior is produced not by reasoned choice or stable character traits but by the circumstances in which people find themselves. *See, e.g.*, Hanson & Yosifon, *Situation*, *supra* note 1.

100. For example, Richard Posner has treated mistaken preferences as merely proof that information costs are positive. RICHARD POSNER, *FRONTIERS OF LEGAL THEORY* 259 (2001). He does not answer how rational actors can function if these costs exceed the resources of any human being.

101. Indeed, behavioral economists have eschewed the search for any general explanation of behavior. *See, e.g.*, Korobkin & Ulen, *supra* note 3, at 1074–75.

102. *See generally* KUNDA, *supra* note 65, at 265–68.

brains work to automate our behavior.¹⁰³ This means that the roots of many of our attitudes and behaviors are beyond our control, and even beyond our understanding through introspection.¹⁰⁴ Just as we cannot understand through introspection, much less control, how our brains direct the movements of the muscle fibers in our legs as we walk, our higher-order cognitive processes such as exercising “will power,” pursuing goals, and reasoning about moral dilemmas are often beyond our understanding and control.¹⁰⁵

Although researchers originally thought nonconscious cognition was limited to simple mental processes, they now believe that it dominates our lives. Nonconscious behavioral processes are so ubiquitous, robust, and effective that some are left wondering what purpose conscious reasoning serves.¹⁰⁶ Automaticity is everywhere, and this is something we should celebrate.¹⁰⁷ Below, this Article

103. Bargh & Chartrand, *supra* note 94, at 464.

104. Bargh, *Consciousness*, *supra* note 95, at 558 (“[R]ecent experimental evidence across several different areas of psychology points to a deep and fundamental dissociation between conscious awareness and the mental processes responsible for one’s behavior; many of the wellsprings of behavior appear to be opaque to conscious access.”).

105. *See, e.g.*, John A. Bargh, *Bypassing the Will: Toward Demystifying the Nonconscious Control of Social Behavior*, in THE NEW UNCONSCIOUS, *supra* note 94, at 37, 41–42 [hereinafter Bargh, *Bypassing the Will*]; DANIEL M. WEGNER, THE ILLUSION OF CONSCIOUS WILL (2002); John A. Bargh & Melissa J. Ferguson, *Beyond Behaviorism: On the Automaticity of Higher Mental Processes*, 126 PSYCHOL. BULL. 925 (2000) [hereinafter Bargh & Ferguson, *Beyond Behaviorism*]; John F. Kihlstrom, *The Cognitive Unconscious*, 237 SCI. 1445, 1447 (1987).

106. Some believe it probably serves *nonconsciousness*—that the main function of consciousness may be “to eliminate the need for itself in the future by making learned skills as automatic as possible.” Bargh, *Bypassing the Will*, *supra* note 105, at 53; *see also id.* (“[M]etacognitive consciousness is the workplace where one can assemble and combine the various components of complex perceptual-motor skills. This ability has given humans a tremendous advantage over other animals, because ‘whereas most other species depend on their built-in demons to do their mental work for them, *we can build our own demons.*’” (quoting M. Donald, A MIND SO RARE 8 (2001))); Bargh, *Consciousness*, *supra* note 95, at 563 (“In a very real sense, then, the purpose of consciousness—why it evolved—may be for the assemblage of complex nonconscious skills.”). Antonio Damasio argues that conscious feelings are necessary in addition to nonconscious affective process because there likely is a limit to the complexity of problems that nonconscious processes can resolve. ANTONIO DAMASIO, LOOKING FOR SPINOZA: JOY, SORROW, AND THE FEELING BRAIN 176–79 (2003) [hereinafter DAMASIO, SPINOZA].

107. Bargh & Chartrand, *supra* note 94, at 464; *see also id.* at 462 (“[M]ost of moment-to-moment psychological life must occur through nonconscious means if it is to occur at all.”). This view is very old in psychology. *See* WILLIAM JAMES, THE PRINCIPLES OF PSYCHOLOGY 122 (1890) (“The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work.”).

reviews evidence of ways in which emotions and related nonconscious processes assist us in navigating the world—evidence that has broad implications for law, legal theory, and policy.

A. Evaluating the Environment

1. Instant evaluation

The story of nonconscious decision making begins with instant evaluations. Nonconscious affective processes constantly judge our surroundings, appraising nearly instantaneously what we encounter as good or bad, before we have time to make cognitive evaluations and often without our ever becoming aware of the affective evaluations.¹⁰⁸ In other words, we usually have feelings about things before we think about them.¹⁰⁹ Often, we have feelings about things without *ever* thinking about them.

The key to studying automatic evaluation is measuring people's reactions in circumstances in which the reactions cannot have been produced by deliberation. The classic model for such studies involves exposing subjects to a positively or negatively valenced word (for example, "cockroach") so briefly that they cannot evaluate it consciously before viewing a second word (such as "disgusting" or "appealing"), which they are asked to evaluate as quickly as possible.¹¹⁰ Studies consistently find that participants evaluate a second stimulus more quickly if it follows a stimulus of the same valence.¹¹¹ This means that the subjects must have evaluated the first

108. Sheila T. Murphy, *Feeling Without Thinking: Affective Primacy and the Nonconscious Processing of Emotion*, in UNRAVELING THE COMPLEXITIES OF SOCIAL LIFE: A Festschrift in Honor of Robert B. Zajonc (John A. Bargh & Deborah K. Apsley eds., 2001) ("[T]he simple emotional or affective qualities of stimuli, such as good/bad, are processed extremely quickly and efficiently without extensive perceptual and cognitive processing.").

109. Robert Zajonc, *Feeling and Thinking: Preferences Need No Inferences*, 35 AM. PSYCHOLOGIST 151 (1980) [hereinafter Zajonc, *Feeling and Thinking*].

110. Russell H. Fazio, *On the Automatic Activation of Associated Evaluations: An Overview*, 15 COGNITION & EMOTION 115, 116 (2001); see also John A. Bargh et al., *The Generality of the Automatic Attitude Activation Effect*, 62 J. PERSONALITY & SOC. PSYCHOL. 893, 894 (1992) [hereinafter Bargh et al., *Generality*]; Bargh & Chartrand, *supra* note 94, at 474.

111. Fazio, *supra* note 110, at 116; see also Melissa J. Ferguson & John A. Bargh, *The Constructive Nature of Automatic Evaluation*, in THE PSYCHOLOGY OF EVALUATION: AFFECTIVE PROCESSES IN COGNITION AND EMOTION 169 (Jocelyn Musch & Karl Christoph Klauer eds., 2003) [hereinafter Ferguson & Bargh, *Constructive Nature*]; Bargh et al., *Generality*, *supra* note 110, at 893–94.

object, even though they had no time to do so consciously. Indeed, people demonstrate instant evaluation even when stimuli are presented simultaneously,¹¹² and even when they cannot perceive the stimuli consciously at all.¹¹³ A variety of studies have confirmed this phenomenon.¹¹⁴

Some researchers initially thought automatic evaluations occur only for objects that evoke strongly held attitudes, but later evidence suggests the effect is much broader, likely occurring during all encounters.¹¹⁵ Likewise, some once thought that automatic evaluations occur only when people have been asked to evaluate something recently,¹¹⁶ but later studies have shown that people automatically evaluate objects without having been primed to do so.¹¹⁷ In fact, the more researchers isolate nonconscious processes from evaluative goals, the stronger the effect becomes.¹¹⁸ Similarly,

112. In early studies, the first stimulus was presented for 200 milliseconds, and the second followed after an interval of 100 milliseconds. A later study on shorter evaluation intervals found evidence of automatic evaluations even when the prime and target stimulus were presented simultaneously and found that the effect was stronger for an interval of 150 milliseconds than the typical interval of 300 milliseconds. See Dirk Hermans, Jan De Houwer & Paul Eelen, *A Time Course Analysis of the Affective Priming Effect*, 15 COGNITION & EMOTION 143 (2001).

113. See, e.g., Anthony G. Greenwald, Sean C. Draine & Richard L. Abrams, *Three Cognitive Markers of Unconscious Semantic Activation*, 273 SCI. 1699 (1996). There are two thresholds for human perception: a subjective threshold at which a person consciously perceives a stimulus and an *objective* threshold at which a third party can observe a physical reaction demonstrating that another person's body has perceived something, even though the person cannot perceive it subjectively. See also Dijksterhuis, Aarts & Smith, *supra* note 94, at 79–80.

114. See, e.g., Bargh et al., *Generality*, *supra* note 110. This research initially provoked strong opposition. When Robert Zajonc began studying automatic evaluation, he challenged conventional wisdom in social psychology that emotional evaluations must have some cognitive component—that people must think before they can prefer—a view that remains dominant in law. But evidence for automatic evaluation has grown increasingly robust over time. See Fazio, *supra* note 110, at 117–19. Note, however, that not all priming studies have been successfully replicated. See Spruyt et al., *On the Replicability of the Affective Priming Effect in the Pronunciation Task*, 51 EXPERIMENTAL PSYCHOL. 109 (2004).

115. See Bargh et al., *Generality*, *supra* note 110, at 894–95 (disputing Russell H. Fazio et al., *On the Automatic Evaluation of Attitudes*, 50 J. PERSONALITY & SOC. PSYCHOL. 229–38 (1986)).

116. See, e.g., John A. Bargh et al., *The Automatic Evaluation Effect: Unconditional Automatic Attitude Activation with a Pronunciation Task*, 32 J. EXPERIMENTAL SOC. PSYCHOL. 104, 113 (1996) [hereinafter Bargh et al., *Automatic Evaluation*].

117. John A. Bargh, *The Psychology of the Mere*, in UNRAVELING THE COMPLEXITIES OF SOCIAL LIFE, *supra* note 108, at 25, 28–31 [hereinafter Bargh, *Mere*] (citing Bargh et al., *Generality*, *supra* note 110, at 893–912).

118. Bargh et al., *Automatic Evaluation*, *supra* note 116, at 109–20.

priming done with people's full awareness is more effective when people believe it will not affect them.¹¹⁹ Moreover, strong evidence also suggests that automatic evaluation is not simply a matter of accessing previously stored judgments.¹²⁰ People automatically evaluate completely novel objects¹²¹ and appear to construct evaluations in the moment, flexibly, with context-specific variation.¹²²

Studies have shown that people engage in automatic evaluations of objects as diverse as words, line drawings, complex photographs of real life, auditory stimuli, and pleasant and unpleasant odors.¹²³ And researchers have found evidence of automatic evaluations during a variety of different tasks, such as evaluative categorization, lexical decisions, pronunciation, and arm movements.¹²⁴ Newer studies using different techniques have bolstered earlier findings,¹²⁵ and current dispute concerns not whether automatic nonconscious evaluation exists but "just how pervasive the effect is"¹²⁶ and how it operates.¹²⁷ We appear to evaluate nearly everything we encounter

119. See, e.g., Bargh, *Consciousness*, *supra* note 95, at 559.

120. Studies show, however, that some automatic evaluation is based on recall of previous judgments. See, e.g., Luigi Castelli et al., *On the Automatic Evaluation of Social Exemplars*, 86 J. PERSONALITY & SOC. PSYCHOL. 373, 374–82 (2004).

121. Ferguson & Bargh, *Constructive Nature*, *supra* note 111; Kimberly L. Duckworth, John A. Bargh, Magda Garcia & Shelly Chaiken, *The Automatic Evaluation of Novel Stimuli*, 13 PSYCHOL. SCI. 513, 514–18 (2002).

122. See Ferguson & Bargh, *Constructive Nature*, *supra* note 111, at 169–85; Melissa J. Ferguson & John A. Bargh, *Sensitivity and Flexibility: Exploring the Knowledge Function of Automatic Attitudes*, in *THE WISDOM IN FEELING: PSYCHOLOGICAL PROCESSES IN EMOTIONAL INTELLIGENCE* 383, 389–400 (Lisa Feldman Barrett & Peter Salovey eds., 2002) [hereinafter Ferguson & Bargh, *Sensitivity and Flexibility*].

123. Hermans et al., *supra* note 112, at 144 (collecting studies).

124. Ferguson & Bargh, *Constructive Nature*, *supra* note 111, at 169–85 (collecting studies); Hermans et al., *supra* note 112, at 144.

125. Melissa J. Ferguson et al., *After-Affects: How Automatic Evaluations Influence the Interpretation of Subsequent, Unrelated Stimuli*, 41 J. EXPERIMENTAL & SOC. PSYCHOL. 182, 182 (2005) (citing William A. Cunningham et al., *Neural Components of Social Evaluation*, 85 J. PERSONALITY & SOC. PSYCHOL. 639, 639–48 (2003); Anthony G. Greenwald et al., *Measuring Individual Differences in Implicit Cognition: The Implicit Association Test*, 74 J. PERSONALITY & SOC. PSYCHOL. 1464, 1464–80 (1998)).

126. Bargh & Chartrand, *supra* note 94, at 474.

127. The mechanisms underlying automatic evaluation are still unknown and are the subject of extensive theory and discussion. For theories, see Ferguson & Bargh, *Constructive Nature*, *supra* note 111, at 6–11; Bargh et al., *Automatic Evaluation*, *supra* note 116, at 120–22; Fazio, *supra* note 110, at 119–21; Ferguson et al., *supra* note 125, at 182–83; and Mark R. Klinger et al., *Mechanisms of Unconscious Priming: I. Response Competition, Not*

emotionally before we can think about it, and sometimes without ever perceiving it consciously.¹²⁸ In other words, all that our minds require to begin working outside our awareness is the mere presence of an object.

2. *Thin slices*

It is easy to see the benefit of instant evaluations—after all, we cannot mull over everything we encounter. If this is true of simple objects, it is even more true regarding complex encounters, and it turns out that nonconscious processes aid these decisions as well. We often make fairly reliable judgments about complex matters without conscious deliberation, or at least based on so little information that we have no possibility of conducting a proper analysis.¹²⁹ Judgments regarding relatively complex concepts and characteristics are typically just as accurate—and often more accurate—when based on “thin slices” of information than when people have more information and more time to reflect.

Researchers have found evidence of good thin-slice judgments in a variety of situations. For example, on the basis of extremely little information, people can intuit gender,¹³⁰ “interpersonal and relational variables such as status, kinship, and deception”¹³¹ and possibly sexual orientation,¹³² and can predict outcomes such as “teacher effectiveness, interpersonal expectancies, and mental patient pathology.”¹³³ After short interactions, people tend to rate strangers’

Spreading Activation, 26 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY & COGNITION 441, 441–43 (2000).

128. Bargh, *Mere*, *supra* note 117, at 28–31; Bargh et al., *Generality*, *supra* note 110, at 894–95.

129. Journalist Malcolm Gladwell recently popularized many of these findings. See MALCOLM GLADWELL, *BLINK* 18–47 (2005).

130. Nalini Ambady et al., *Accuracy of Judgments of Sexual Orientation from Thin Slices of Behavior*, 77 J. PERSONALITY & SOC. PSYCHOL. 538, 538–39 (1999) (finding that people can determine someone’s gender in the dark merely by watching the individual walk with points of light on his or her joints for 200 milliseconds).

131. *Id.* at 538.

132. See *id.* Several studies suggest people may be able to determine others’ sexual orientation on the basis of thin-slice judgments, but the results cannot be deemed conclusive. *Id.* at 539, 543–46.

133. *Id.* at 538 (citations omitted).

traits similarly to other people's ratings and even similarly to the strangers' self-ratings.¹³⁴

Studies of teacher evaluations are particularly persuasive because they observe teachers in their actual environments.¹³⁵ The results are remarkable. Nalini Ambady and Robert Rosenthal conducted a study in which college undergraduates watched thirty-second silent video clips of graduate teaching assistants teaching classes and evaluated them on social characteristics such as optimism and confidence and non-verbal behaviors such as nodding and gazing downward.¹³⁶ The evaluations were averaged into a composite and compared to end-of-semester student evaluations of teacher effectiveness. Remarkably, evaluations based on thirty seconds of silent video correlated highly with student evaluations after semester-long courses.¹³⁷ The researchers repeated the same study with high school teachers and found the same correlation between the thin-slice judgments and principals' evaluations of teachers.¹³⁸ Most astonishing, when the researchers repeated the experiments with fifteen-second and six-second video clips, the results were not significantly different.¹³⁹

In 1992, Ambady and Rosenthal conducted a meta-analysis of forty-four studies in which people were given between 30 and 300 seconds to make quick judgments on criteria such as teacher effectiveness, teacher bias, existence of deception, patient commitment and compliance with therapy, physician proficiency and patient satisfaction, comprehension in children, voting behavior, levels of anxiety, and depression.¹⁴⁰ They found robust confirmation

134. Bargh & Chartrand, *supra* note 94, at 475.

135. Nalini Ambady & Robert Rosenthal, *Half a Minute: Predicting Teacher Evaluations from Thin Slices of Nonverbal Behavior & Physical Attractiveness*, 64 J. PERSONALITY & SOC. PSYCHOL. 431, 432 (1993).

136. *Id.* at 432–35. Ambady and Rosenthal also evaluated several other characteristics, including whether the teacher was accepting, active, (not) anxious, attentive, competent, dominant, empathetic, enthusiastic, honest, likable, professional, supportive, and warm. *Id.* at 433.

137. For the end-of-semester evaluations, researchers averaged students' responses to the items "Rate the quality of the section overall" and "Rate the section leader's performance overall." *Id.* at 433. The judges' and students' evaluations correlated at .76, and at .74 after controlling for the teachers' physical attractiveness. *Id.* at 434–35, 439.

138. The judges' and principals' evaluations correlated at .80. *Id.* at 435–37.

139. *Id.* at 437–38. Across the thirty-, fifteen-, and six-second studies, the judges' ratings generally were reliable also in their consistency with others' judgments. *Id.* at 432–38.

140. Nalini Ambady & Robert Rosenthal, *Thin Slices of Expressive Behavior as Predictors of Interpersonal Consequences: A Meta-Analysis*, 111 PSYCHOL. BULL. 256, 260–62 (1992).

that thirty-second observations yielded judgments as accurate as those derived from extensive testing, performance observations, and interviews.¹⁴¹ Other studies have shown that quick evaluations are sometimes more reliable than thoughtful evaluations.¹⁴²

3. Deciding advantageously without knowing the advantageous strategy

Humans are not just good at quickly sizing up people's characteristics. We also make quick, reliable judgments about situations that require substantial thought and calculation to be resolved rationally—and we do so even when we lack the information necessary for a proper rational calculation. In a classic illustration, neurobiologist Antonio Damasio and his colleagues developed a game in which people were given \$2000 in play money and told to gain as much (and lose as little) as possible by picking cards from one of four decks lettered A through D. Drawing from deck A or B usually awarded \$100 but occasionally carried a penalty large enough that drawing from those decks would consistently cause long-term losses. Decks C and D usually returned \$50 and occasionally carried penalties small enough that drawing from those decks would still result in consistent long-term gains.¹⁴³ Players had no idea what the decks would provide, no means of recording or calculating results, and no ability to project averages. They were not told how many cards they would be permitted to draw during the game. As participants played, researchers observed their behavior, emotions, and thoughts. They recorded the number of times participants drew from each deck, recorded skin conductance responses,¹⁴⁴ and asked participants two questions after every twenty

141. *Id.* at 263, 265–67.

142. See Timothy D. Wilson & Jonathan W. Schooler, *Thinking Too Much: Introspection Can Reduce the Quality of Preferences and Decisions*, 60 J. PERSONALITY & SOC. PSYCHOL. 181, 182–88, 191–92 (1991).

143. Antonio R. Damasio et al., *Deciding Advantageously Before Knowing the Advantageous Strategy*, 275 SCI. 1293, 1293–95 (1997) [hereinafter Damasio et al., *Deciding Advantageously*].

144. A skin conductive response (SCR) is a measure of the electrical conductivity of the skin. It is calculated by attaching leads to the skin, which measure the skin's electrical resistance. See generally Rui Miguel Costa & Francisco Esteves, *Skin Conductance Responses to Visual Sexual Stimuli*, 67 INT'L J. PSYCHOPHYSIOLOGY 64 (2008); David L. Neumann & Paula L. Longbottom, *Extinguishing Conditioned Fear with Fear-relevant and Fear-irrelevant Stimuli by a Context Change After Extinction*, 46 BEHAV. RES. & THERAPY 188 (2008); H.

draws: (a) “Tell me all you know about what is going on in this game,” and (b) “Tell me how you feel about this game.”¹⁴⁵

After drawing just ten cards, which included some losses from decks A and B, participants began to generate significant skin conductance responses when they considered drawing from those decks.¹⁴⁶ After twenty draws, however, players still professed to have no idea how the game worked. That is, their emotions began warning them that decks A and B were risky, but they had no conscious awareness of this. After drawing fifty cards, all players voiced a “hunch” that decks A and B were riskier, and seven of ten ultimately articulated a correct theory of the game. Three never deduced how the game worked but still chose correctly.¹⁴⁷

4. Emotion and reason: affect as a decision necessity

There is more to the gambling study than mentioned above, and the remainder has even more important implications for our understanding of emotion. In addition to the ten participants, Damasio and his colleagues ran the same study with six individuals who had damage to a portion of the brain that is heavily involved in emotion and, as it turns out, decision making.¹⁴⁸ This Article will return to that study in a moment, after a brief detour to discuss the brain damage involved and its impact on emotion and decisions.

For years, Damasio has studied and treated patients with damage to certain areas of the brain.¹⁴⁹ One patient, whom he calls “Elliot,” was an intelligent, successful, able-bodied businessman and a good husband and father before he developed a brain tumor. After its removal, Elliot retained his intelligence, use of language, and physical abilities, but his personality changed dramatically. He now needed someone to prod him to go to work. Once there, he could not manage his time. He could spend an entire afternoon contemplating which principle of organization he should use to file a

Rae Westbury & David L. Neumann, *Empathy Related Responses to Moving Film Stimuli Depicting Human and Non-human Animal Targets in Negative Circumstances*, 78 *BIOLOGICAL PSYCHOL.* 66 (2008).

145. Damasio et al., *Deciding Advantageously*, *supra* note 143, at 1293.

146. *Id.* at 1293–94.

147. *Id.* at 1293.

148. *Id.* The subjects had bilateral damage to the ventromedial prefrontal cortices. *Id.*

149. See ANTONIO R. DAMASIO, *DESCARTES' ERROR: EMOTION, REASON, AND THE HUMAN BRAIN* 54–74 (Avon Books 1995) [hereinafter DAMASIO, *DESCARTES' ERROR*].

paper—date, size, relationship to other matters, or any other factor. Elliot eventually lost his job, squandered his savings on a series of unsuccessful businesses, divorced, remarried, and divorced again.¹⁵⁰

Elliot was brought in to see Damasio after losing his disability payments. By this time, “[s]everal professionals had declared that his mental faculties were intact—meaning at the very best Elliot was lazy, and at the worst a malingerer.”¹⁵¹ Elliot certainly appeared mentally fit:

[C]learly he knew what was occurring in the world around him. Dates, names, details in the news were all at his fingertips. He discussed political affairs with the humor they often deserve and seemed to grasp the situation of the economy. His knowledge of the business realm he had worked in remained strong. I had been told his skills were unchanged, and that appeared plausible. He had a flawless memory for his life story¹⁵²

But Elliot clearly had difficulty making decisions since having his brain tumor removed. Naturally, Damasio first tested Elliott’s intellect. He measured intelligence, perceptual ability, long-term memory, short-term memory, working memory, new learning ability, arithmetic, language, sorting ability, and ability to make estimates. On each test, Elliot scored between average and superior. Despite all his real-life difficulties, he appeared normal or above average on every measure of intellect and rationality.¹⁵³

Damasio began to wonder whether he was looking in the wrong place, and he eventually found that he was. He had always thought Elliott was surprisingly reserved and unaffected, but over time he realized that Elliot’s lack of emotion was utterly peculiar. Elliott appeared not to feel pain or loss over the tragedy in his life. In fact, Damasio found himself more disturbed and moved by Elliott’s stories than Elliot himself. As a result, Damasio began to examine Elliot’s emotions more directly. He showed Elliott pictures of earthquakes, burning houses, and people with grotesque injuries, finding that Elliot was unmoved by them. Elliot knew that such pictures influenced people emotionally—indeed, he said they would have evoked emotions in him before his surgery—but he did not feel

150. *Id.* at 34–51.

151. *Id.* at 34.

152. *Id.* at 35.

153. *Id.* at 41–43.

anything when viewing them. Since his surgery, Elliot's emotions had gone virtually flat.¹⁵⁴ And so Damasio began to suspect a link between Elliot's two major deficiencies—feeling emotions and making decisions.

Damasio decided to subject Elliot to another round of tests, this time examining Elliot's knowledge about social behavior and his ability to make moral and ethical judgments. Damasio and a colleague tested Elliot's ability to generate options for action, his awareness of consequences, his ability to conceptualize effective means of achieving a social goal, and his level of moral reasoning. Again, Elliot performed well on every test. What, then, the scientists wondered, could account for the differences in Elliot's performance on tests in a lab and his glaring difficulties in everyday life? The key, it turns out, was that the tests required Elliot only to generate options; they did not ask him to *choose*. After generating abundant options during one test, Elliot remarked, "And after all this, I still wouldn't know what to do!"¹⁵⁵

Finally, the diagnosis became acute. Elliot and similar patients¹⁵⁶ could think rationally—that is, logically—but could not emote as ordinary people do and had great difficulty making decisions. Emotion and decision making appeared to be linked fundamentally in the brain. This suggested that the long-standing conventional wisdom that too much emotion impairs decision making is at best only half the story. Too little emotion might be equally or even more

154. *Id.* at 45.

155. *Id.* at 46–49.

156. Famed psychological specimen Phineas Gage is the first known person with symptoms such as Elliot's. At age twenty-five, a railroad spike blasted through Gage's brain, entering his left cheek and exiting the top of his head before landing over a hundred feet away. Within minutes, Gage was talking calmly, answering questions, and telling bystanders what had happened. He survived an infection, was pronounced healed within two months, and lived another thirteen years. But Gage changed drastically after the accident. He no longer observed basic social norms and could not hold a job. He spent some time selling himself as a circus attraction, then held a series of manual labor jobs before dying at age thirty-eight, apparently from epilepsy. *Id.* at 3–10. Justice William O. Douglas displayed similar symptoms after a stroke in 1975. Despite left-side paralysis, it was not immediately apparent that he could not continue on the bench; he retained language ability and appeared to have normal brain function. Soon, though, his obliviousness to his own condition (he suffered from anosognosia, an absence of awareness of an injury), his erratic behavior, his poor judgment in everyday matters, and his inability to observe basic social norms led the other members of the Court to determine he was unfit. *See id.* at 68 (citing BOB WOODWARD & SCOTT ARMSTRONG, *THE BRETHREN: INSIDE THE SUPREME COURT* (1979)).

harmful.¹⁵⁷ Freedom from emotion does not beget good choices, as we typically assume; it begets an inability to choose.

Damasio began to theorize that, instead of facing the infinite array of conceivable, logical thoughts and actions in every situation, some nonconscious affective process rejects many potential courses of action automatically, dramatically reducing the scope of decision alternatives.¹⁵⁸ He has been developing and testing this theory for nearly fifteen years with impressive results.¹⁵⁹ Without this process, or something akin to it, decision making would be impossible because the sheer number of calculations required in any situation would be paralyzing. Even more important, calculations are only that—predictions of results. Without emotional evaluations of those predictions, it is impossible to decide which outcome is preferable.¹⁶⁰ In this sense, logical reasoning is like a street map, and affective processes are what tell us which way to go and how quickly.

When this ability to emotionally experience potential outcomes is impaired, we can spend hours on even the simplest decisions.¹⁶¹ Damasio relates the story of a patient who had immense difficulty making the simple choice of when to schedule his next appointment:

I suggested two alternative dates, both in the coming month and just a few days apart from each other. The patient pulled out his appointment book and began consulting the calendar For the better part of a half-hour, the patient enumerated reasons for and against each of the two dates: previous engagements, proximity to

157. *Id.* at 52–53.

158. Damasio theorizes that a system of effective guideposts, which he calls “somatic markers,” assists the decision process by tagging decision consequences with different valences, narrowing decision possibilities nearly instantaneously. They can be likened to “gut feelings,” pre-cognitively. *Id.* at 171–74; *see also* ERIC R. KANDEL ET AL., *ESSENTIALS OF NEURAL SCIENCE & BEHAVIOR* 596–97 (1995). To explain the simplicity and power of such a process, Damasio uses the example of bumblebees. Bumblebees do not stop at flowers randomly; they appear to predict and choose the flowers with the most nectar in advance. This behavior could be explained by a few basic processes. The bee must be able to detect reward and have an automated process that produces certain motor results (landing or not) in the presence or absence of cues (such as color of a flower) that have corresponded (or not) with the reward. Such a system marks rewarding situations and steers the bee toward them automatically, without any thought. Furthermore, because of bees’ small capacities for memory, the system must require only a very small sample size. Apparently, as few as three visits will suffice. DAMASIO, *DESCARTES’ ERROR*, *supra* note 149, at 185–87.

159. *See* Antoine Bechara & Antonio R. Damasio, *The Somatic Marker Hypothesis: A Neural Theory of Economic Decision*, 52 *GAMES & ECON. BEHAV.* 336 (2005).

160. DAMASIO, *DESCARTES’ ERROR*, *supra* note 149, at 172.

161. *See id.* at 172–74.

other engagements, possible meteorological conditions, virtually anything that one could reasonably think about concerning a simple date [H]e was now walking us through a tiresome cost-benefit analysis, an endless outlining and fruitless comparison of options and possible consequences. It took enormous discipline to listen to all of this without pounding on the table and telling him to stop, but we finally did tell him, quietly, that he should come on the second of the alternative dates. His response was equally calm and prompt. He simply said: "That's fine."¹⁶²

"[T]his behavior," Damasio continues dryly, "is a good example of the limits of pure reason."¹⁶³ Thus, we see that the dominant model is mistaken in treating emotions as pure objects of decisions because they are a fundamental part of the decision-making process. Merely knowing the consequences of actions is not enough; emotions must tell our bodies which course to pursue, often quickly and nonconsciously.

Now let us return to the card-game experiment. Recall that the normal participants began generating anticipatory skin conductance responses when contemplating the losing decks after drawing just ten cards, even though they professed strategic ignorance and were unaware of their emotional apprehensions; and recall that players who never understood the game nonetheless made good decisions. The six brain-damaged patients were a striking contrast: none of them generated a skin conductance response, and none made advantageous decisions.¹⁶⁴ Most astonishing, three of the brain-damaged participants eventually deduced as a logical matter which decks were good and bad *but continued to choose poorly*.¹⁶⁵

B. Affect and Nonconscious Processes in Cognition and Behavior

The research discussed above may be interesting in its own right, but it provides only a limited view of the picture of human behavior—a glimpse loosely analogous to the "preferences-as-objects" component in the typical model of decisions. It only begins to hint at how those processes interact with the environment to produce our attitudes and behavior, a loose analogy to the "choices"

162. *Id.* at 193–94.

163. *Id.* at 194.

164. Damasio et al., *Deciding Advantageously*, *supra* note 143, at 1293–94.

165. *Id.*

component. Researchers have catalogued myriad ways in which environmental stimuli, through nonconscious affective processes, influence our perceptions, attitudes, and, ultimately, behavior. This section reviews some of those studies, beginning with the simplest. Here, the line between “preferring” and “choosing”—or *feeling* and *behaving*—begins to blur.

1. *Automatic attitudes*

a. Mere exposure. Simply being exposed to something will cause you to like it more, a phenomenon researchers have termed the mere exposure effect.¹⁶⁶ In a typical study, researchers expose people to objects a varying number of times, then ask the participants to evaluate several objects, some of which they have previously seen. People are more likely to evaluate objects favorably when they have already seen them.¹⁶⁷ Equally significant, people are unaware of this effect. When asked to identify why they prefer certain objects, people cite a range of factors but rarely mention having seen an object before.¹⁶⁸ Moreover, when researchers ask participants about the familiarity of objects, subjective judgments of familiarity do not correlate with tastes; only the number of exposures does.¹⁶⁹

This lack of awareness led researchers to suspect that the mere exposure effect might obtain even when people are wholly unaware of an object—and it does. In a typical study, researchers expose participants to objects for a period so brief that they cannot perceive

166. Robert Zajonc, *Closing the Debate over the Independence of Affect*, in FEELING AND THINKING, *supra* note 15, at 35 [hereinafter Zajonc, *Closing the Debate*]; Robert Zajonc, *Mere Exposure: A Gateway to the Subliminal*, 10 PSYCHOL. SCI. 224 (2001).

167. In one experiment, subjects were shown Chinese ideographs once, twice, five, ten, or twenty-five times. Later, the same objects were presented again, interspersed with others, and subjects were asked whether each object represented something “good” or “bad.” Subjects responded positively more often to objects they had previously viewed, and more exposures yielded higher likelihoods of positive evaluation. Zajonc, *Closing the Debate*, *supra* note 166, at 36. Another study took photographs of pairs of friends or lovers and made both normal and reversed prints of each. People consistently preferred the reversed image of themselves over the normal one (the way they see themselves in mirrors) but liked normal images of their friends and lovers. *Id.* at 36–37.

168. In the Chinese ideograph study, participants cited factors such as symmetry, complexity, or shape, or said the ideograph reminded them of a landscape or sculpture. *Id.* at 40 (“Out of the hundreds of participants we have tested, perhaps one or two have ever said that the feeling of familiarity was a factor in their preferences.”).

169. *Id.* at 42.

the objects consciously,¹⁷⁰ then show the participants a pair of objects, one previously viewed and one new, and ask which one the subjects prefer and which they have seen before. Participants are unable to determine which they have seen but select it more frequently as the one they prefer.¹⁷¹ This effect has been found for a wide range of objects, such as “geometric figures, random polygons, Chinese and Japanese ideographs, numbers, letters of the alphabet, letters of one’s own name, random sequences of tones, non-sense syllables, odors, flavors, colors, foods, faces, actual persons, and many others.”¹⁷² It has also been found across cultures, various personality types, and among different species.¹⁷³

b. Automatic attitudes. Similar to the mere exposure effect, priming is a phenomenon by which environmental cues can make certain feelings more accessible to us, thereby altering downstream attitudes outside our conscious awareness. A most basic example of priming is a person’s tendency to like something better when primed with something pleasant. In a typical study, people subliminally exposed to a smiling face evaluate objects more positively than people shown nothing, who in turn evaluate objects more positively than people shown a frowning face. This manipulation can result from priming stimuli that have nothing whatsoever to do with the objects being judged and, like the exposure effect, can occur entirely outside of conscious awareness.¹⁷⁴

Priming is not limited to subliminal images of smiling faces. Automatic attitude formation is ubiquitous, holding for much more complex attitudes as well. For example, people primed with the word “achieve” view others as more achieving.¹⁷⁵ Priming loyalty increases in-group favoritism and the identification and expectation of loyal

170. The time period was one millisecond. *Id.* at 43. This can be termed *subliminal*. Most researchers avoid that term because of its stigma, instead using *implicit* or *nonconscious*.

171. *Id.* at 43–44.

172. *Id.* at 35; see also Robert Bornstein et al., *The Generalizability of Subliminal Mere Exposure Effects: Influence of Stimuli Perceived Without Awareness on Social Behavior*, 53 J. PERSONALITY & SOC. PSYCHOL. 1070 (1987).

173. Zajonc, *Closing the Debate*, *supra* note 166, at 36 (noting effects among “American undergraduates, nationals of 12 countries, sons of alcoholics, amnesiacs, dieters, chicks, ducklings, and goslings”).

174. *Id.* at 49–50, 52–54. For more evidence of positive primes causing more positive evaluations, see Ferguson & Bargh, *Sensitivity and Flexibility*, *supra* note 122; and Ferguson et al., *supra* note 125, at 189–90.

175. Ferguson & Bargh, *Sensitivity and Flexibility*, *supra* note 122.

behavior from others.¹⁷⁶ Priming cooperation or competition moderates whether people name a prisoner's dilemma game the "Community Game" or "Battle of Wits" and whether they express the intent to cooperate or defect when playing.¹⁷⁷ Exposure to business-related objects such as suits, fountain pens, and boardroom tables causes people to perceive interactions as more competitive than cooperative.¹⁷⁸ Showing a fat vase to women who are dissatisfied with their bodies can trigger feelings of body dissatisfaction.¹⁷⁹ Indeed, reading the word "fat" in the preceding sentence likely accomplished the same. Nonconscious attitude shifts occur "in an uncontrollable manner similar to how written words activate their meanings during reading."¹⁸⁰ More broadly, emotions themselves are contagious. Listening to happy or sad speakers makes listeners happier or sadder, respectively, and even sitting silently in a room with someone in another mood can cause others to "catch" a mood.¹⁸¹

2. *Automatic behavior*

Given the evidence on automatic attitudes, it should hardly be surprising that nonconscious affective processes often mediate behavior as well. More remarkable are the breadth, robustness, and directness of documented effects, as well as our inability to perceive or control them. Researchers have found countless ways in which perceptions of the environment directly influence behavior.

176. Aaron C. Kay & Lee Ross, *The Perceptual Push: The Interplay of Implicit Cues and Explicit Situational Construals on Behavioral Intentions in the Prisoner's Dilemma*, 39 J. EXPERIMENTAL SOC. PSYCHOL. 634, 635 (2003) (citing Guido Hertel & Norbert L. Kerr, *Priming In-Group Favoritism: The Impact of Normative Scripts in the Minimal Group Paradigm*, 37 J. EXPERIMENTAL SOC. PSYCHOL. 316 (2001)).

177. Kay & Ross, *supra* note 176, at 637–40.

178. Aaron C. Kay et al., *Material Priming: The Influence of Mundane Physical Objects on Situational Construal and Competitive Behavioral Choice*, 95 ORG. BEHAV. & HUM. DECISION PROCESS 83, 87–88 (2004).

179. See Debra Trampe, Diederik A. Stapel & Frans W. Siero, *On Models and Vases: Body Dissatisfaction and Proneness to Social Comparison Effects*, 92 J. PERSONALITY & SOC. PSYCHOL. 106, 111–14 (2007).

180. Bargh, *Consciousness*, *supra* note 95, at 558.

181. Tanya L. Chartrand et al., *Beyond the Perception-Behavior Link: The Ubiquitous Utility and Motivational Moderators of Nonconscious Mimicry*, in THE NEW UNCONSCIOUS, *supra* note 94, at 343.

a. Mimicry. In a “manifestation of the perception-behavior link at its most fundamental level,”¹⁸² we nonconsciously mimic countless behaviors of others. Is it widely understood that yawns and laughter are contagious,¹⁸³ but mimicry extends far beyond these circumstances. In verbal interactions, we mimic others’ word choice, sentence structure and grammar, accent, tone of voice, speech rhythm, duration of speech pauses, and rate of speech.¹⁸⁴ We also mimic facial expressions and other behaviors such as posture and gestures.¹⁸⁵ Mimicry is so nonconscious that our mimicking movements are sometimes imperceptible to us. A study using machines to monitor muscle movements found that people imperceptibly move the muscles involved in smiling when they view happy facial expressions and the muscles involved in frowning when they view angry facial expressions.¹⁸⁶ Similar studies found that people’s lip muscles move imperceptibly when they watch a stuttering person and arm and wrist muscles move when they watch others arm-wrestle.¹⁸⁷

b. Automaticity. Mimicry is only the beginning. Researchers have found countless ways in which perceptions of the environment directly influence behavior. For example, priming people with a trait such as rudeness or politeness skews behavior toward the trait.¹⁸⁸ The

182. *Id.* at 335.

183. *Id.* at 338 (yawning); *id.* at 336 (laughter).

184. *Id.* at 335–36.

185. *Id.* at 337–39.

186. *Id.* at 339.

187. *Id.* at 341.

188. John A. Bargh, Mark Chen & Lara Burrows, *The Automaticity of Social Behavior: Direct Effects of Trait Construct & Stereotype Activation on Action*, 71 J. PERSONALITY & SOC. PSYCHOL. 230, 233–36 (1996). In one study, researchers instructed subjects to construct grammatically correct four-word phrases out of five-word sets, such as “he it hides finds instantly,” as quickly as possible. The priming terms were included in the word sets. For example, to prime politeness, researchers used the terms “respect, honor, considerate, appreciate, patiently, cordially, yield, polite, cautiously, courteous, graciously, sensitively, discreetly, behaved, and unobtrusively.” Subjects engaged in the activity one at a time and, afterward, each was instructed to seek another task from a researcher down the hallway. When the subject approached, the researcher was engaged in conversation with a confederate. The confederate timed how long each participant waited before interrupting. Participants primed with rudeness interrupted more quickly than those whose word task used neutral terms, who in turn interrupted more quickly than subjects primed with politeness. *Id.* Subjects did not vary significantly in their ratings of the experimenter’s politeness; therefore, it is unlikely that the variation in interruption time was due to variation in perceptions of the experimenter. *Id.* at 235.

priming need not be direct. Priming broad schemas that are in turn associated with specific traits has the same effect. Thus, people act with more hostility not only when primed with words directly related to hostility,¹⁸⁹ but also when primed with stereotypes associated with violence.¹⁹⁰ Similarly, exposing people to business-related objects causes them to behave more competitively.¹⁹¹

Our perceptions also automatically influence more complex behaviors such as exercises of cognitive ability. Thus, priming people with stereotypes of the elderly not only causes them to walk more slowly,¹⁹² it also diminishes performance on memory tests.¹⁹³ People primed with stereotypes of professors or the trait “intelligent” perform better on tests of general knowledge, while people primed with the stereotype of hooligans or the trait “stupid” perform more poorly.¹⁹⁴ And reminding people of a negative stereotype applied to their group harms their performance.¹⁹⁵

Given indirect and schema-based activation, these effects can operate through exceedingly subtle means. For example, asking African American students to list eight friends who would fit well in a computer science department—a field in which only four percent of the population is African American—lowers the students’ sense that they would fit in computer science, lowers their self-perceived potential to succeed in computer science, activates thoughts about their racial identity, and makes them more likely to discourage same-

189. *Id.* at 236.

190. *Id.* at 232.

191. Kay et al., *supra* note 178, at 88–91.

192. Bargh, Chen & Burrows, *supra* note 188, at 236–38; Ap Dijksterhuis et al., *Seeing One Thing and Doing Another: Contrast Effects in Automatic Behavior*, 75 J. PERSONALITY & SOC. PSYCHOL. 862, 865–66 (1998).

193. Ap Dijksterhuis, John Bargh & J. Miedema, *Of Men and Mackerels: Attention and Automatic Behavior*, in SUBJECTIVE EXPERIENCE IN SOCIAL COGNITION AND BEHAVIOR (Herbert Bless & Joseph Forgas eds., 2000); Bargh & Chartrand, *supra* note 94, at 466.

194. Ap Dijksterhuis & Ad van Knippenberg, *The Relation Between Perception and Behavior, or How to Win a Game of Trivial Pursuit*, 74 J. PERSONALITY & SOC. PSYCHOL. 865, 870–73 (1998). Note that priming an *exemplar* of a particular type evokes a different behavioral reaction. Whereas priming “professor” improves cognitive performance; the opposite occurs for priming with a particular professor against whom people believe they compare unfavorably on the trait—say, Albert Einstein. *Id.* at 864–65.

195. See, e.g., Jerry Kang & Mahzarin R. Banaji, *Fair Measures: A Behavioral Realist Revision of Affirmative Action*, 94 CAL. L. REV. 1063, 1087–88 (2006) (citing several studies, mostly in the context of race, where groups performed poorly when primed with negative stereotypes concerning their group).

race peers from entering computer science—all without activating in their minds negative stereotypes about African Americans.¹⁹⁶ All that is needed is to question whether they belong.¹⁹⁷

These effects have also been found with respect to goals. Environmental factors can activate people's goals and lead them to behave as they would if they had consciously chosen to pursue the goals.¹⁹⁸ For example, people primed with "achievement" perform better, persist in tasks longer, and return to tasks better after interruptions than people not primed with the goal.¹⁹⁹ Activating a broad schema such as a social relationship also can activate goals relevant to that schema—in this case, relevant to the relationship. For example, asking people questions about a good friend rather than a co-worker makes them more likely to help strangers,²⁰⁰ and priming someone with his or her best friend's name makes him or her more likely to explain a stranger's undesirable behavior by charitable reference to situational factors rather than the stranger's intentions.²⁰¹ Priming people with thoughts of their mothers causes them to perform better on intellectual tasks, and all the more so if they identify themselves as desiring to make their mothers proud.²⁰² And priming people who have long-term goals of fairness and

196. Gregory M. Walton & Geoffrey L. Cohen, *A Question of Belonging: Race, Social Fit, and Achievement*, 92 J. PERSONALITY & SOC. PSYCHOL. 83–87 (2007).

197. *Id.*

198. John Bargh et al., *The Automated Will: Nonconscious Activation and Pursuit of Behavioral Goals*, 81 J. PERSONALITY & SOC. PSYCHOL. 1024 (2001); Tanya L. Chartrand & John A. Bargh, *Automatic Activation of Impression Formation and Memorization Goals: Nonconscious Goal Priming Reproduces Effects of Explicit Task Instructions*, 71 J. PERSONALITY & SOC. PSYCHOL. 464 (1996) [hereinafter Chartrand & Bargh, *Automatic Activation*]. The mental processes appear identical once the goal is activated. Bargh & Ferguson, *Beyond Behaviorism*, *supra* note 105, at 936.

199. Chartrand & Bargh, *Automatic Activation*, *supra* note 198, at 1022–24. Subjects primed with "achievement" perform better on a word-search task even when all subjects are instructed "to find as many words as possible." *Id.* at 1016–17. Researchers have observed this effect for the goals of impression-formation, *id.* at 1016, and cooperation, *id.* at 1017–18. Remarkably, although the effect of priming on evaluations fades quickly, goal-priming effects grow stronger over at least short time periods. *Id.* at 1020–21.

200. Gráinne M. Fitzsimons & John A. Bargh, *Thinking of You: Nonconscious Pursuit of Interpersonal Goals Associated with Relationship Partners*, 84 J. PERSONALITY & SOC. PSYCHOL. 148, 152–53 (2003).

201. *Id.* at 155–57.

202. *Id.* at 157–58.

egalitarianism with the presence of a minority group member causes them automatically to reduce the use of stereotypes.²⁰³

Finally, these automatic effects have been found in far more abstract behavioral orientations. People primed with words associated with intrinsic motivation such as “challenge, spontaneous, [or] mastering” are more likely to enjoy a task, to feel they are exercising free choice in doing it, and to perform better than people primed with words associated with extrinsic motivations such as “restricted, forced, [or] expected.”²⁰⁴ Furthermore, people primed with the concept of power are more likely to take action in a variety of situations²⁰⁵ and more likely to think at higher levels of abstraction.²⁰⁶ Indeed, merely watching people behave in a manner that suggests they are pursuing a particular goal influences others to pursue the same goal.²⁰⁷

c. Neurological evidence. In addition to evidence from social psychology, neuroscience increasingly provides evidence of nonconscious processes steering behavior—and of a vast disconnect between people’s awareness, intentions, and actions. There are two types of evidence in this area: experimental evidence with people who have brain lesions, and evidence about brain structure itself.

In the first category, experimental evidence with people who have brain lesions, are individuals who can form accurate impressions that certain people are friendlier than others without being able to remember a single thing about any of the people in question.²⁰⁸ Other examples are people who can identify an object such as a book but are unable to reach for it when asked to do so, and people who cannot identify the object as a book but, if asked casually to pick up

203. Gordon B. Moskowitz et al., *Preconscious Control of Stereotype Activation Through Chronic Egalitarian Goals*, 77 J. PERSONALITY & SOC. PSYCHOL. 167 (1999).

204. Bargh & Ferguson, *Beyond Behaviorism*, *supra* note 105, at 934–35.

205. Adam D. Galinsky, Deborah H. Gruenfeld & Joe C. Magee, *From Power to Action*, 85 J. PERSONALITY & SOC. PSYCHOL. 453, 464 (2003).

206. Pamela K. Smith & Yaacov Troupe, *You Focus on the Forest when You’re in Charge of the Trees: Power Priming and Abstract Information Processing*, 90 J. PERSONALITY & SOC. PSYCHOL. 578, 594 (2006).

207. Henry Aarts et al., *Goal Contagion: Perceiving Is for Pursuing*, 87 J. PERSONALITY & SOC. PSYCHOL. 23, 35 (2004). Unless the observed goal-pursuing behavior is unacceptable, in which case the opposite effect occurs. *Id.* at 23.

208. DAMASIO, *THE FEELING OF WHAT HAPPENS: BODY AND EMOTION IN THE MAKING OF CONSCIOUSNESS* 43–45 (1999).

the book, will do so.²⁰⁹ These findings suggest that conscious reasoning, memory, and intention can be wholly disconnected from behavior.

Regarding evidence in brain structures, neuroscientists have found a neurological basis for mimicry and possibly other manifestations of perception-behavior automaticity in “mirror neurons,” “in which simply watching mouth, hand, and foot movements activates the same functionally specific regions of the premotor cortex as when performing those same movements oneself.”²¹⁰

3. *Affect and “cold” cognition*

Substantial research has also shown that emotion deeply influences (and is influenced by) “cooler” components of cognition. Below, this Article sketches emotion’s role in (a) memory; (b) knowledge structures; and (c) cognitive processing style.

a. Attention and memory. Emotion has several important influences on memory. First, memories are often biased in a mood-congruent manner, meaning that happy people are more likely to recall happy memories, sad people to recall sad memories, and so on.²¹¹ Emotions also moderate both attention and long-term memory retention, playing a substantial role in both whether we perceive and record information in the first instance and how well we remember it later.²¹² This is probably why we are more likely to remember highly emotional events.²¹³

b. Knowledge structures. Knowledge structures are “the building blocks of cognition’ . . . whose many crucial functions ‘include classification, inferring additional attributes, guiding attention and

209. Bargh, *Bypassing the Will*, *supra* note 105, at 44.

210. *Id.* at 45.

211. KUNDA, *supra* note 65, at 187–90. There is also mixed evidence that people may be more likely to recall memories that were formed during a mood that matches the current mood. *Id.* at 191–93. Congruence has also expanded to include judgments as well. People in positive moods are more likely to make more positive judgments about themselves, other people, and inanimate objects, and the opposite applies to those in negative moods. *See generally id.* at 246–49.

212. *See generally* Elizabeth A. Phelps, *The Interaction of Emotion and Cognition: Insights from Studies of the Human Amygdala*, in *EMOTION AND CONSCIOUSNESS* 51, 58–62 (Lisa Feldman Barrett et al. eds., 2005).

213. *Id.*

interpretation, communication, and reasoning.”²¹⁴ Jon Hanson, who has written extensively about knowledge structures and their significance to law and legal theory,²¹⁵ explains with David Yosifon:

We process stimuli “through preexisting systems of schematized and abstracted knowledge—beliefs, theories, propositions, and schemas. These knowledge structures label and categorize objects and events quickly and, for the most part, accurately. They also define a set of expectations about objects and events and suggest appropriate responses to them.” Thus, the benefit of such knowledge structures is that they provide us, often automatically, with a way of understanding our world so that we can operate reasonably well within it, at the same time that they free up cognitive capacity to cope with other pressing issues.²¹⁶

Knowledge structures are involved in the bulk of the instances of automaticity discussed earlier in this Article. For example, priming someone with a material object related to business, such as a briefcase, causes that person to interpret other people’s actions and to act herself in a manner more consistent with *the knowledge structure business*—for example, more competitively.²¹⁷ The knowledge structure, once activated, filters subsequent attention, memory, cognitive processing, and behavior.

Predictably, given its influence on attention and memory, emotion heavily influences the operation of knowledge structures: “When a particular emotion is activated . . . schemas and other cognitive materials that are tagged with that emotion will be primed for both the identification of mood-congruent stimulus material and for the recall of congruent material from memory. In other words, affect influences the schemas people apply to interpret events.”²¹⁸

214. Hanson & Yosifon, *Situational Character*, *supra* note 1, at 50–51 (quoting KUNDA, *supra* note 65, at 16; LEE ROSS & RICHARD E. NISBETT, *THE PERSON AND THE SITUATION* 12 (1983)).

215. See Jon D. Hanson & Ronald Chen, *Categorically Biased: The Influence of Knowledge Structures on Law and Legal Theory*, 22 S. CAL. L. REV. 1103 (2004); Hanson & Yosifon, *Situational Character*, *supra* note 1, at 50–83.

216. Hanson & Yosifon, *Situational Character*, *supra* note 1, at 51 (quoting LEE ROSS & RICHARD E. NISBETT, *HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT* 18 (1980) (citing Hanson & Chen, *supra* note 215, at 1139–77)).

217. See Kay et al., *supra* note 178, at 87–88.

218. Hanson & Chen, *supra* note 215, at 1182 (citing Walter H. Crockett, *Schemas, Affect, and Communication*, in *COMMUNICATION, SOCIAL COGNITION, AND AFFECT* 33, 34 (Lewis Donohew et al. eds., 1988)); see also Ralph Erber, *Affective and Semantic Priming*:

Affect also moderates the formation and reformation of knowledge structures. Take, for example, the classic study Hanson and Yosifon cite in which researchers running a summer camp divided boys into two groups, Eagles and Rattlers, and had the two groups square off in various competitions:

[B]oth out-group animosity and in-group solidarity increased dramatically as the competitions continued, and the resultant stereotyping, prejudice, and discrimination that followed were robust: “Mere informational campaigns, even those couched in appeals in moral values, were universally unsuccessful in reducing enmity. Sunday religious services that interrupted the period of competition with especially pointed appeals for brotherly love, forgiveness of enemies, and cooperation had no impact. The campers solemnly departed from the services and then, within minutes, returned to their preoccupation with defeating or harassing the detested out-group.”²¹⁹

The perception of a threat from another group quickly fostered the formation of strong negative schemas about the out-group. The schemas were highly resistant to reasoned discourse and also could not be undermined merely by “placing the groups in various noncompetitive settings together—taking meals, filling out surveys, shooting off fireworks, and so on . . . as subsequent food fights demonstrated.”²²⁰

The enmity diminished only when the researchers began placing the campers in “situations of mutual dependence and cooperation.”²²¹

For example, a bus transporting both groups to dinner “broke down,” forcing the hungry campers to cooperate. With a rope that had once been used in the tug-of-war competition, the groups worked to jointly push and pull the bus to restart it. Operating under such cooperative (“common enemy”) conditions over time, the campers changed their group-based views of one another and

Effects of Mood on Category Accessibility and Inference, 27 J. EXPERIMENTAL SOC. PSYCHOL. 480, 480 (1991).

219. Hanson & Yosifon, *Situational Character*, *supra* note 1, at 55–56 (quoting ROSS & NISBETT, *supra* note 214, at 40); *see also* MUZAFER SHERIF ET AL., INTERGROUP CONFLICT AND COOPERATION: THE ROBBERS CAVE EXPERIMENT 117–49 (1961).

220. Hanson & Yosifon, *Situational Character*, *supra* note 1, at 56 (citing SHERIF ET AL., *supra* note 219, at 151–58).

221. *Id.*

intergroup friendships emerged “between erstwhile rivals and even former enemies.” By the end of the summer, “the twenty boys themselves proposed that they return to Oklahoma City in a single bus, and the self-chosen seating did not reflect the Eagles’ and the Rattlers’” group identities.²²²

In other words, the perception of a threat from others fostered the construction and application of strong negative schemas. These schemas could not be undone easily through rational appeals or neutral encounters between the groups. Instead, they were undone by altering the affective valence of the out-group, by turning enemies into collaborators.

c. Processing style. Emotion also influences cognitive processing. Not only are people in positive moods inclined “to like just about everything better”;²²³ mood also influences the very processing style that people use. Researchers discovered long ago that people in negative moods focus more on details and appear to think more carefully about judgments. This led some to believe that happy people’s brains are less active than sad people’s brains, perhaps because people in good moods are simply less motivated to think hard.²²⁴ This theory accords with the common sense assumption that negative moods signal to people that something is wrong and they should remedy the circumstances, whereas positive moods signal that all is well.

More recent evidence suggests happy brains are no less active than sad brains. Instead, people in positive moods think just as actively, but are more likely to employ “top down” processing, relying more on established knowledge structures. In contrast, people in negative moods examine contextual details more closely.²²⁵ Researchers have found, for example, that people rely on more scripts—a knowledge structure consisting of a set of expectations for

222. *Id.* (citing SHERIF ET AL., *supra* note 219, at 170–71, 182; quoting ROSS & NISBETT, *supra* note 214, at 39; quoting ROGER BROWN, SOCIAL PSYCHOLOGY 611 (2d ed. 1986)) (brackets omitted).

223. SUSAN FISKE & SHELLEY TAYLOR, SOCIAL COGNITION 446–47 (1991).

224. Herbert Bless, *The Interplay of Affect and Cognition: The Mediating Role of General Knowledge Structures*, in FEELING AND THINKING, *supra* note 15, at 207–08.

225. *Id.* at 203.

the appropriate sequence of events in well-known situations²²⁶—when in positive moods than in neutral or negative moods.²²⁷

For example, people in positive moods are more likely than those in negative moods to recall events that did not actually happen but that they could expect to have occurred in a given context.²²⁸ In a typical study, researchers described to subjects a narrative about a common occurrence, such as a dinner outing. In the description, they included statements typical of the experience (“the hostess placed the menus on the table”) and information anomalous to the experience (“he put away his tennis racket”).²²⁹ After a short time, participants were tested on their memory of the narrative by being asked whether bits of typical and atypical information were part of the original narrative. Half of this information had been included in the original accounts, while the other half was new to the participants. Happy subjects were far more likely than neutral or sad subjects to “remember” script-typical information, whether they had heard it or not. Meanwhile, people in all moods remembered script-atypical information at the same levels.²³⁰

Similar results have been found with respect to stereotypes,²³¹ heuristics,²³² prior judgments,²³³ and the fundamental attribution error²³⁴—the failure to account for numerous situational factors that contribute to observed behavior.²³⁵ In each case, happy people rely more on general knowledge structures or mental shortcuts, while sad people display a stronger tendency to process the details of a given situation.

226. Scripts are also termed “event schemas.” FISKE & TAYLOR, *supra* note 223, at 119.

227. Bless, *supra* note 224, at 205–06.

228. *Id.*

229. *Id.* at 205.

230. *Id.* at 205–06.

231. *Id.* at 204.

232. *Id.* at 206.

233. *Id.* at 206–07.

234. Joseph P. Forgas, *Affect and Information Processing Strategies: An Interactive Relationship*, in FEELING AND THINKING, *supra* note 15, at 270–71 [hereinafter Forgas, *Affect and Information Processing*].

235. See Hanson & Yosifon, *Situation*, *supra* note 1, at 285.

4. *Out of control*

It is important to emphasize that there is no easy way for us to counteract or avoid many of these phenomena.²³⁶ As a general matter, we cannot control all of them because we cannot perceive all of them.²³⁷ But even when we perceive the impact of emotion on our behavior, we may be unable to control it because emotion has such a heavy influence on what we think of as “colder” cognition, including our thoughts about our automatic behavior. Indeed, our very attempts to evade the influence of affective processes are influenced by them—even caused by them in the sense that, when we try to control these processes, it is because we are motivated, emotionally, to do so.²³⁸

a. Affect infusion and over-correction. One example of our difficulty in counteracting emotion with “reason” is psychologist Joseph Forgas’s counterintuitive finding that mood states influence complex decisions more than simple decisions. Forgas categorizes cognitive processing into four types, in order of complexity: direct access, motivated, heuristic, and substantive processing,²³⁹ and has

236. Bargh, Chen & Burrows, *supra* note 188, at 241.

237. *Id.*

238. *Id.*

239. Forgas, *Affect and Information Processing*, *supra* note 234, at 255; Joseph P. Forgas, *Mood and Judgment: The Affect Infusion Model*, 117 *PSYCHOL. BULL.* 39, 46–47 (1995). *Direct access processing* requires merely accessing a decision made earlier. People employ direct access processing when a task is “well known or familiar, and when no strong cognitive, affective, situational, or motivational cues call for more elaborate processing.” Forgas, *Affect and Information Processing*, *supra* note 234, at 255. *Motivated processing* occurs when people are driven to reach a particular conclusion and therefore involves “highly selective and targeted information search strategies, directed by a specific motivational objective.” *Id.* at 255–66. Examples of motivations are self-affirmation, desire to meet expectations, desire for closure, and the desire for coherence. For more comprehensive overviews of motivated processing see FISKE & TALYOR, *supra* note 223, at 211–25; KUNDA, *supra* note 65, at 212–46; and Hanson & Yosifon, *Situational Character*, *supra* note 1, at 90–115. In *heuristic processing*, people cannot rely on stored responses and are not motivated toward a particular conclusion, and they rely on heuristics to “compute a constructive response with minimal effort.” Forgas, *Affect and Information Processing*, *supra* note 234, at 256. For more comprehensive overviews on the use of heuristics, see FISKE & TALYOR, *supra* note 223; and KUNDA, *supra* note 65, at 53–110. Finally, people engage in *substantive processing* when they face “complex, novel or atypical” tasks, when “there is no motivational goal to dominate processing,” and when heuristics are unavailable, unhelpful, or unneeded. Forgas, *Affect and Information Processing*, *supra* note 234, at 256. People employ substantive processing most often when “the situation calls for constructive, elaborate processing” or when they “need to actually select, learn, and interpret novel information and relate this information to their preexisting knowledge structures in order to construct a response.” *Id.*

found that contemporaneous mood influences decisions more at each level of complexity in a process he terms “affect infusion.”²⁴⁰ In a typical study, subjects are primed with positive or negative affect (leaving, of course, an unprimed control group). Subjects are then asked to evaluate various persons or objects such as a series of well-matched or poorly matched romantic couples,²⁴¹ a task that requires different levels of processing.²⁴² People take more time to evaluate mismatched couples, and emotion influences these judgments more.²⁴³ Other studies asking people to evaluate the causes of problems in their own relationships (evaluations that require complex analysis) show high degrees of affect infusion: people primed with positive affect explain relationship difficulties more optimistically, blaming problems on external and temporary causes, while those primed with negative affect are more critical and likely to blame themselves for problems.²⁴⁴

Forgas’s findings destabilize some of our bedrock assumptions about decision making—that we can reason away the influence of emotion, and that quicker, more impulsive decisions are somehow more “emotional.” His evidence suggests that the more people must think about a decision, the more influence contemporaneous emotion has.²⁴⁵ Affect infusion is “most likely when people engage in genuinely open, constructive processing strategies that require the

240. Forgas, *Affect and Information Processing*, *supra* note 234, at 255–59.

241. Couples were well-matched or poorly matched along the lines of race and attractiveness, features regarding which people expect homogeneity in couples. See Joseph P. Forgas, *Strange Couples: Mood Effects on Judgments and Memory about Prototypical and Atypical Targets*, 21 PERSONALITY & SOC. PSYCHOL. BULL. 747 (1995).

242. Forgas, *Affect and Information Processing*, *supra* note 234, at 259–260 (citing Joseph P. Forgas, *On Bad Mood and Peculiar People: Affect and Person Typicality in Impression Formation*, 62 J. PERSONALITY & SOC. PSYCHOL. 863–75 (1992)).

243. *Id.* at 260–61.

244. Forgas, *Affect and Information Processing*, *supra* note 234, at 261.

245. *Id.* This is not to say that affect does not play a great role in other decisions as well—only that *current* mood is less influential. In less complex forms of processing, affect influences the decision at a different moment in time. See *id.* at 258. For example, in direct-access processing, the stored response that a person accesses may be a memory, schema, or script that was influenced by affect at the time of recording. Motivated processing is inherently affective; contemporaneously induced mood states have less influence on these decisions because an overriding affective goal is steering the decision. Moreover, many motivations are emotion-centered, such as the motive to maintain and repair one’s mood. See *id.* In heuristic processing, affect serves as one important heuristic itself, in which people rely on their “gut feelings.” See generally Slovic et al., *The Affect Heuristic in Judgments of Risks and Benefits*, 13 J. BEHAV. DECISION MAKING 1 (2000).

use of memory-based information to construct a judgment.”²⁴⁶ These tasks “involve the active elaboration and transformation of the available stimulus information, require the activation and use of previous knowledge structures, and result in the creation of new knowledge from the combination of stored information and new stimulus details.”²⁴⁷ Therefore, the more a person thinks about a decision, the less able he is to control his emotions by keeping his emotions out of it.

Another example of people’s inability to control the impact of emotion on their behavior is when people try to counteract the effects of their moods. Other studies have shown that people who are motivated to counteract the effects of their moods often over-correct and act in a manner skewed toward the opposite emotion.²⁴⁸ This is hardly an absence of emotional influence.

b. The illusion of conscious will. A final reason for skepticism regarding our ability to counteract the effects of emotion in decisions is that evidence increasingly suggests that we have little control of most of our actions—and, indeed, that conscious control may be an illusion.²⁴⁹ Neuroscientists have found for example that representations of conscious intentions and representations that control actions are located in distinct areas of the brain²⁵⁰ and that the portion of the brain that guides action appears to fire before the portion of the brain that registers conscious intention.²⁵¹ This raises the important point that consciousness and deliberation should not be confused with control. We do not necessarily control our

246. Joseph P. Forgas & Rebekah East, *Affective Influences on Social Judgments and Decisions*, in SOCIAL JUDGMENTS: IMPLICIT AND EXPLICIT PROCESSES 198, 203–04 (Joseph P. Forgas et al. eds., 2003).

247. *Id.* at 204. It is unclear how far the affect infusion model extends. Even the most complex processing decisions in Forgas’s experiments could be made relatively quickly and with little conscious processing. It remains to be seen whether the affect infusion model holds when people ponder decisions at much greater length. For that reason, the affect infusion model has greater application at this time to legal situations in which people make relatively quicker decisions (for example, many consumer contexts) rather than extensively deliberated and rationalized decisions (such as judicial opinion-writing). The affect infusion model may hold even farther up the range of decision-making complexity, but the jury is still out right now.

248. See Leonard Berkowitz et al., *On the Correction of Feeling-Induced Judgmental Biases*, in FEELING AND THINKING, *supra* note 15, at 131, 135.

249. See generally WEGNER, *supra* note 105, at 29–49.

250. Bargh, *Bypassing the Will*, *supra* note 105, at 47.

251. WEGNER, *supra* note 105, at 49–61.

thoughts and actions even when we perceive ourselves as acting deliberately.

5. Context-dependent interaction with the environment

The point here is not to suggest that people can be manipulated predictably and easily. There is no simple relationship between environmental cues and our attitudes and behavior.²⁵² Countless studies have shown that the effect of mood on memory, judgments, and cognitive processing varies across different circumstances²⁵³ and personality types.²⁵⁴ Likewise, the effects of the environment on attitudes and behavior are complex, often conflicting, and deeply context-dependent.²⁵⁵ This is only proper. Automatic attitudes and behavior would have limited value if they remained constant across varying situations. An efficient system of nonconscious appraisal must evaluate a bottle of soda differently depending on whether you

252. See, e.g., Lee Ross & Donna Shestowsky, *Contemporary Psychology's Challenges to Legal Theory and Practice*, 97 NW. U. L. REV. 1081, 1088 (2003) ("An important truism of social psychology is that people respond not to some objective reality but to their own subjective interpretations or definitions of that reality. Thus, to understand, predict and influence a given individual's behavior, it is necessary to understand, predict, and control the processes by which that individual 'construes' the events to which he or she responds. Furthermore, variability and unpredictability in such subjective construals can give rise to variability and unpredictability in behavior . . .").

253. See, e.g., Leonard L. Martin, *Moods Do Not Convey Information: Moods in Context Do*, in FEELING AND THINKING, *supra* note 15, at 153, 155. It is worth noting that the affect infusion model, see *supra* text accompanying notes 239–48, holds that situational factors exert a strong influence on the extent to which contemporaneous emotion will influence decisions. This is because emotion's influence is contingent on the cognitive processing strategy that an individual uses, and processing strategy is, itself, dictated by situational factors—the type of decision, the characteristics of the person deciding, and the circumstances in which that person operates. See Forgas, *Affect and Information Processing*, *supra* note 234, at 260.

254. See, e.g., Joseph Ciarrochi & Joseph P. Forgas, *The Pleasure of Possessions: Affective Influences and Personality in the Evaluation of Consumer Items*, 30 EUR. J. SOC. PSYCHOL. 631, 634–35 (2000) (brief review); Cheryl L. Rusting, *Personality, Mood, and Cognitive Processing of Emotional Information: Three Conceptual Frameworks*, 124 PSYCHOL. BULL. 165, 165–68 (1998).

255. Bargh, *Bypassing the Will*, *supra* note 105, at 39; Bargh & Ferguson, *Beyond Behaviorism*, *supra* note 105, at 931; see also Joseph P. Forgas & Simon M. Laham, *The Interaction Between Affect and Motivation in Social Judgments and Behavior*, in SOCIAL MOTIVATION: CONSCIOUS AND UNCONSCIOUS PROCESSES 168, 170 (Joseph P. Forgas et al. eds., 2005) ("[T]he same affective state can have a congruent, incongruent, or no effect on subsequent motivated action, depending on subtle shifts in people's preferred information processing strategies.").

will drink its contents or be struck by it, whether you are thirsty, and whether you desire to lose weight.²⁵⁶

Countless studies document the context-specificity of automatic attitudes and behavior. A college woman's level of excitement from reading a sexually provocative magazine article varies depending on whether she has been thinking about campus friends or her parents beforehand.²⁵⁷ Catholic women rate themselves more negatively on characteristics such as morality, self-esteem, and anxiety after reading a sexually provocative passage if primed subliminally with a scowling picture of the Pope.²⁵⁸ A graduate student is more likely to rate her ideas negatively after subliminal exposure to a scowling picture of her advisor.²⁵⁹ People are more likely to feel badly about failing at a task—and to blame themselves rather than the task—if primed with a relationship contingent on successful performance rather than an unconditionally accepting relationship²⁶⁰ or primed with the name of someone significant to them who they feel disapproves of them.²⁶¹ Automatic effects are also mediated by current motivations,²⁶² and emotional attempts at persuasion are more likely to succeed if they

256. Ferguson & Bargh, *Sensitivity and Flexibility*, *supra* note 122, at 389 (citing Arthur M. Glenberg, *What Memory Is For*, 20 BEHAV. & BRAIN SCI. 1 (1997)); *cf.* Berridge, *supra* note 35, at 15 (“The sight of food has no intrinsic motivational value. It is merely an aggregation of visual shapes and colors, like the sight of any object. It is not an incentive until value becomes attached to it by experience.”).

257. See Mark W. Baldwin, *Relational Schema Activation: Does Bob Zajonc Ever Scowl at You From the Back of Your Mind?*, in UNRAVELING THE COMPLEXITIES OF SOCIAL LIFE, *supra* note 108, at 55, 56–57.

258. *Id.* at 59–60 (citing Mark W. Baldwin, Suzanne E. Carrell & David F. Lopez, *Priming Relationship Schemas: My Advisor and the Pope Are Watching Me from the Back of My Mind*, 26 J. EXPERIMENTAL PSYCHOL. 435 (1990)). Priming the women with the scowling face of another individual had no effect. *Id.* at 60.

259. *Id.* at 58.

260. *Id.* at 57.

261. Mark W. Baldwin & Jennifer Meunier, *The Cued Activation of Attachment Relational Schemas*, 17 SOC. COGNITION 209 (1999).

262. Melissa J. Ferguson & John A. Bargh, *Liking Is for Doing: The Effects of Goal Pursuit on Automatic Evaluation*, 87 J. PERSONALITY & SOC. PSYCHOL. 557, 557 (2004).

match the emotional states of audience members.²⁶³ Reactions to environmental cues also vary with individual characteristics.²⁶⁴

In short, people do not react to stimuli in a simple, predictable manner; reactions vary across personalities, motivations, needs, moods, rules, and norms—in short, across all types of situations. Thus, there is no reason to think we can predict or steer human behavior with any precision. To say that we often do not control our own actions is not to say that others control them. At the same time, we should not underestimate manipulation. There is strong evidence that our attitudes and behavior can be manipulated outside our awareness²⁶⁵ and that such influences can be very difficult to counteract.²⁶⁶ Just as meteorologists can predict probabilities of precipitation given a set of environmental variables, we can predict probabilities of human action given a set of human circumstances. And the more variables we can control, the better the predictions. Likewise, in human behavior, the more aspects of the situation we can control, the more behavior can be predicted and controlled. This is why, as Hanson and Yosifon have written, controlling people's situations means controlling their actions, and firms will compete fiercely to control people's situations, even without understanding what they are doing. Hanson and Yosifon have termed this process "power economics."²⁶⁷

263. David DeSteno et al., *Discrete Emotions and Persuasion: The Role of Emotion-Induced Expectancies*, 86 J. PERSONALITY & SOC. PSYCHOL. 43, 43 (2004). Also, implicit stimuli often influence us more than do explicit stimuli. See Laura J. Kray, Leigh Thompson & Adam Galinsky, *Battle of the Sexes: Gender Stereotype Confirmation and Reactance in Negotiations*, 80 J. PERSONALITY & SOC. PSYCHOL. 942, 943 (2001).

264. For example, priming "power" has differential effects on male sexual arousal depending on how much men find sexual aggression attractive. John A. Bargh et al., *Attractiveness of the Underling: An Automatic Power → Sex Association and Its Consequences for Sexual Harassment and Aggression*, 68 J. PERSONALITY & SOC. PSYCHOL. 768, 777–79 (1995). And exposure to images of attractive women harms a woman's evaluation of her body image more if she is already dissatisfied with her body. See Trampe, Stapel & Siero, *supra* note 179, at 106–07.

265. See generally Dijksterhuis, Aarts & Smith, *supra* note 94, at 82.

266. See, e.g., Aiden P. Gregg, Beate Seibt & Mahzarin R. Banaji, *Easier Done Than Undone: Asymmetry in the Malleability of Implicit Preferences*, 90 J. PERSONALITY & SOC. PSYCHOL. 1, 3 (2006).

267. Hanson & Yosifon, *Situation*, *supra* note 1, at 197; see also Hanson & Kysar, *TBS I*, *supra* note 13, at 635.

C. The Pursuit of Being, Not Well-Being

Rather than suggest that people can be controlled by others as puppets, the goal of this Article is to outline a more realistic account of widely ignored or misunderstood forces in decision making, answer the question of how we navigate the world in light of our inability to reason through most of the decisions that our environments demand of us, and determine the proper place of emotion in theories of decision making. The answer appears to be that nonconscious, affective processes interact constantly with the environment and other biological processes (including more “cognitive” phenomena such as knowledge structures) to direct our attitudes and behavior.²⁶⁸ The evidence is beginning to suggest that automatic processes are capable of controlling *most* aspects of our behavior—that they even regulate our emotions²⁶⁹ and exercise self-control for us.²⁷⁰ Nonconscious affective processes are likely homeostatic, designed to promote self-preservation.²⁷¹ And higher-order emotions may be a complex, highly evolved version of the basic affective mechanism common to all life: approach and avoidance.²⁷²

This suggests that “preferences” and “welfare” are mistaken concepts, at least as they are commonly understood. “Preferences” are the name we give to most salient and acceptable reasons we can identify for our behavior in various situations, which we believe we have chosen. This is backward. Rather than mere objects of decision about which we reason and strategize, the emotional forces that we

268. This research is just getting started. *See* Bargh, *Mere*, *supra* note 117, at 25, 30–31 (“Moods are affected by the general tone of the automatic evaluations made in one’s current environment, social judgments are influenced by them, and behavioral dispositions at the level of muscular readiness to approach or to avoid the object are also automatically put into motion by the evaluative reaction. The power of the affective system to guide subsequent cognition and behavior is perhaps just beginning to be revealed.”) (citations omitted).

269. *See* John A. Bargh & Lawrence E. Williams, *The Nonconscious Regulation of Emotion*, in *HANDBOOK OF EMOTION REGULATION* 429 (James J. Gross ed., 2006).

270. *See* Ayelet Fishbach & James Y. Shah, *Self-Control in Action: Implicit Dispositions Toward Goals and Away from Temptations*, 90 *J. PERSONALITY & SOC. PSYCHOL.* 820 (2006). This has left some experts wondering what purpose *conscious thought* serves, the best conjecture being that *it serves nonconsciousness* by helping us automate increasing amounts of behavior. *See, e.g.*, Bargh, *Bypassing the Will*, *supra* note 105, at 53; Bargh, *Consciousness*, *supra* note 95, at 563.

271. DAMASIO, SPINOZA, *supra* note 106, at 30–40.

272. DAMASIO, DESCARTES’ ERROR, *supra* note 149; DAMASIO, SPINOZA, *supra* note 106, at 40–54.

call “preferences” are some of the very processes that enable our bodies to interact with the environment, making decisions for us, in the absence of conscious monitoring and control. The environment constantly demands responses from us at a rate and level of complexity far greater than our conscious reasoning skills can accommodate, but our nonconscious processes rise to meet this challenge. Thus, in contrast to the economic assumption that choices are “preference-satisfying,”²⁷³ it would be better to view “preferences” as “choice-satisfying”: when the situation demands a behavioral response, the emotional processes that we call “preferences” provide it. As for “welfare,” unfortunately, there is little reason to assume that these processes maximize our happiness. The most we can say without entering a spiritual or religious discussion is that they help us survive in the evolutionary sense.

Thus, we come to an important distinction between “approach and avoidance” and “good and bad.” It is analogous to the difference Dan Gilbert and Kent Berridge have observed between “wanting” and “liking.”²⁷⁴ Not everything toward which our affective processes steer us is good, and not everything from which they steer us is bad. This is why affective processes should be thought of as approach-and-avoidance or go/no-go processes²⁷⁵ instead of authentic judgments about, or windows into, “preferences” and “welfare.”

“Good” and “approach” can be misaligned for many reasons. One important reason is that approach-and-avoidance processes did not evolve to make us happy, at least inasmuch as happiness is unnecessary to evolutionary fitness. Rather, they evolved to help us navigate the world.²⁷⁶ Flashing lights automatically engage our attention but are not necessarily good for us. Their extensive use in environments carefully structured to extract money from people (casinos) is probably not welfare-enhancing. And just as insects fly into bug zappers, human children must be taught not to stare into

273. *See supra* text accompanying notes 8–12.

274. *See supra* text accompanying notes 15–36.

275. Robert B. Zajonc, *Emotions*, in 1 THE HANDBOOK OF SOCIAL PSYCHOLOGY 591, 596 (Daniel T. Gilbert et al. eds., 4th ed. 1998).

276. Because these processes are products of evolution, they can be expected to have numerous arbitrary, and even mildly harmful, effects so long as they are not evolutionarily lethal. Some may be epiphenomena. Others may be poor but adequate. Still others may have served a purpose only long ago, under different circumstances.

the sun. (How are they taught? With warnings about a highly salient adverse consequence: the possibility of blindness.) Indeed, most traps that we set for other animals, from bug zappers to duck calls, employ approach responses harmfully. Our challenge is to recognize that we have more in common with other species than we think.

To be sure, affective processes mostly serve us well. After all, we are not dead, and most of us are happy most of the time.²⁷⁷ However, all other things being equal, there is no reason to believe that emotions exist to make us happy. In turn, there is little reason to believe that any given behavior reflects a “preference” or anything other than the context-dependent interaction of our biological processes with the environment, and equally little reason to believe that any given behavior increases “welfare.”

IV. THEORIES OF EMOTION IN LAW

Now that we have reviewed empirical evidence on emotion, we can review legal theories of emotion to see how they fit the evidence and to determine whether they should be modified. We will examine rational choice theory, behavioral economics, and cultural cognition theory, focusing on three questions. First, what does the theory say about emotion’s role in decision making? (How much role does emotion play, and is it good or bad? Do authentic preferences exist?) Second, what does each theory say about the rationality of decisions? (I consider two kinds of “rationality”—consistency, meaning the logical consistency of choices, and propriety, meaning the questions whether choices are in some sense good or correct.) Third, how does the theory perform in terms of empiricism, parsimony, coherence, and its normative contribution?²⁷⁸

A. (*Unemotional*) Rational Choice Theory

Emotion and Rationality. Pure rational choice theory does not account for emotion as a part of the decision-making process.

277. See PEW RESEARCH CENTER, ARE WE HAPPY YET? 1 (2006); Diener & Diener, *supra* note 56, at 181.

278. Authors associated with each theory likely will dispute some of my characterizations, and some objections will be well-founded. Authors have not been perfectly consistent or clear regarding some of the factors on which I evaluate their work. Additionally, summarizing any broad body of work inevitably requires line-drawing that will result in occasional unfairness. I apologize in advance for any major errors.

Instead, it holds that emotion called preferences, welfare, and utility is exclusively an object of non-emotional decisions. Under this view, people have authentic, stable preferences, which are revealed by their decisions. Decisions themselves are rational in that they are consistent and proper—consistent because they follow logical rules and proper because they reflect authentic preferences.²⁷⁹ For purposes of comparison to other legal views on emotion, rational choice theory may be thought of as unemotional rational choice theory.

Normative Implications. Part of rational choice theory's allure is the clarity and simplicity of its normative implications. The theory holds that because people generally make good decisions when left to their own devices—decisions that maximize well-being—policy makers should let them do so, interfering with free choice only in instances of market failure. Furthermore, policy makers can ascertain “value” merely by looking at people's behavior—for example, by looking at the price of a good in a well-working market. Although rational choice theory eschews emotion as part of the decision-making process, emotion (as revealed by behavior) is the theory's source of authority for policy makers.²⁸⁰

Empiricism, Internal Consistency, and Parsimony. Rational choice theory, as widely understood, sacrifices empiricism for simplicity, consistency, and parsimony, and the pure form of the theory's view of emotion has limited value in light of widespread evidence that decisions are irrational and, to a lesser extent, that emotions play a large role in decisions. These problems have received ample attention in the legal literature and should not require elaboration here.²⁸¹

Integrating Emotion into Rational Choice. One rational choice theorist, Eric Posner, has attempted to integrate emotion into the theory.²⁸² His goal is to challenge the view of emotions as “‘outside’ forces that compel one to act inconsistently with the interests of the

279. See MARY ZEY, RATIONAL CHOICE THEORY AND ORGANIZATIONAL ANALYSIS: A CRITIQUE 1–3 (1998).

280. See *supra* Part I.

281. See, e.g., William M. Landes, *The Empirical Side of Law & Economics*, 70 U. CHI. L. REV. 167, 180 (2003) (“In the legal academic pecking order, empirical research does not rank as high as theory. This translates into a downward shift in the demand for empirical relative to theoretical scholarship in law and economics.”); Chris William Sanchirico, *Finding Error*, 2003 MICH. ST. L. REV. 1189, 1190 (“[I]t is often fair to criticize rational choice theory for being insufficiently grounded in empirical reality.”).

282. See Posner, *supra* note 89, at 1978.

self”²⁸³—for example, irrationally—while “hew[ing] as closely as possible” to the model of rational choices against a backdrop of stable preferences.²⁸⁴ I believe his attempt is unsuccessful because, in accommodating emotion into rational choice theory, he loses much of the theory’s core content.

Posner’s main contention is that people remain fully rational when in “emotion states” or in “the grip of an emotion.”²⁸⁵ All that occurs is a temporary change in preferences, abilities and beliefs.²⁸⁶ In other words, an emotion causes the individual’s utility function to shift but not to break down.²⁸⁷ Moreover, Posner assumes that people can anticipate and control their future emotion states and therefore counteract future shifts.²⁸⁸

This account is flawed first in its assumption that we ordinarily make decisions in an emotionless state, a view that is inconsistent with the body of evidence reviewed above suggesting that emotion is ubiquitous in decision making.²⁸⁹ In short, Posner recognizes emotion where it is most obvious and salient—for example, in instances of rage or fear—but misses its presence in other decisions. Second, while there is some merit to Posner’s view that people can control their emotions by cultivating them and planning for them, I believe he overestimates this ability in light of evidence that we are worse at anticipating our emotions and controlling them than we believe.²⁹⁰

The account also suffers from another problem. Posner arrives at a view that looks little like rational choice theory—indeed, one that is basically situationist. He argues that a model of utility curves that shift with varying emotional states retains a “rational choice element” because emotional behavior will “bear some resemblance to calm-state behavior” and because people in emotion states

283. *Id.* at 1980.

284. *Id.* at 1984.

285. *Id.* at 1982.

286. *Id.* at 1984.

287. *Id.* at 1987–88.

288. *Id.* at 1985.

289. *See supra* Part III.

290. Blumenthal has already made this criticism. Blumenthal, *Affective Forecasting*, *supra* note 4, at 231–32.

“remain responsive to incentives.”²⁹¹ But if utility curves shift with emotional states, and if we modify Posner’s approach to account for emotion’s presence in a far greater range of decisions, then the account suggests little more than that individuals respond to their circumstances at any particular moment. The only claim to rationality here is that, if put in identical circumstances, a person would act identically. This bears little resemblance to a model in which people pursue stable preferences in a rational manner across time and space. Posner’s view thus loses much of rational choice theory’s predictive value.

The account also loses rational choice theory’s normative thrust. Posner believes that either an emotion-state or a calm-state curve may reflect authentic value for the individual in any given situation,²⁹² and it is left to policy makers to ascertain which to value.²⁹³ I think Posner is right that either hotter or cooler decisions may be better for welfare in any given situation. But this approach, especially when we accommodate a much broader role for emotion and nonconscious processes in decision making, sacrifices rational choice theorists’ principle normative claim that utility curves reveal value.

B. Behavioral Economics, or Emotional Irrational Choice Theory

The term “behavioral economics” has been applied to a large volume of work that is difficult to characterize succinctly. It can be said fairly, however, that behavioral economics aspires only to make piecemeal modifications to rational choice theory in order to make it more realistic,²⁹⁴ and we can discern a general behavioral-economic view of emotion. Behavioral economics thus maintains rational choice theory’s assumption that emotion is mostly an irrational force that interferes with sound decision making, but it accepts that this happens in a much broader range of circumstances.

291. Posner, *supra* note 89, at 1990 (“[W]here the rational choice element remains is in (1) the insistence that people remain rational during the emotion state, so that their behavior will bear some resemblance to calm-state behavior, and remain responsive to incentives . . .”).

292. *Id.* at 2012.

293. *Id.* (“Both kinds of preferences must be evaluated, and included in or excluded from the social welfare function, in accordance with the degree to which satisfaction of them contributes to the individual’s well-being.”).

294. Korobkin & Ulen, *supra* note 3, at 1051, 1074–75; Rostain, *supra* note 7, at 974–75.

For purposes of comparison to other views of emotion, we can think of behavioral economics as “emotional irrational choice theory” or “emotional irrationalism.” This view holds that emotion plays a role in many decisions but that emotion is irrational and distorting in the decision-making process.²⁹⁵ Therefore, decisions are often inconsistent and improper. Authentic preferences still exist—they remain the objects of decisions in the form of “welfare”—but people often act as their irrational selves rather than their rational selves and fail to pursue their true preferences.

1. Emotional irrationalism’s empiricism

In light of the empirical evidence reviewed above, it is clear that emotional irrationalism is right about much regarding emotion, and it is an improvement over rational choice theory. Perhaps it is surprising, then, that emotional irrationalism still fares poorly on empirical standards such as coherence and parsimony. Foremost, emotional irrationalism ignores extensive evidence that emotion performs a useful function in many circumstances and is probably essential to decision making.

Additionally, emotional irrationalism continues to assume that authentic preferences and welfare exist but provides no means of identifying them and often ignores strong evidence that they do not exist. Although some emotional irrationalists have noted that the evidence appears to suggest that preferences are so context-dependent and contingent that “true” preferences may not exist,²⁹⁶ or at least that we cannot discern them,²⁹⁷ the same individuals stake out positions on paternalism as a general matter and on specific

295. Cass Sunstein has objected to the claim that he views emotional or heuristic decision making as “irrational,” arguing instead that he would call it “boundedly rational.” Cass R. Sunstein, *Misfearing: A Reply*, 119 HARV. L. REV. 1110, 1112–13 (2006). I believe the label “irrational” is fair, at least for purposes of this discussion. Sunstein affirms that his work on risk regulation addresses the problem of emotionally based “blunders.” *Id.* at 1121. By my definition, emotional blunders represent “emotional irrationality” because they result in inconsistent and non-welfare-enhancing decisions.

296. *See, e.g.*, Jolls, Sunstein & Thaler, *supra* note 39, at 1545–46.

297. Blumenthal, *Affective Forecasting*, *supra* note 4, at 231–32. Although Blumenthal’s work on emotion is very strong, and more realistic than that of most other irrationalists, *see id.*; Jeremy A. Blumenthal, *Emotional Paternalism*, 35 FLA. ST. U. L. REV. 1, 2–6 (2007) [hereinafter Blumenthal, *Emotional Paternalism*], I place him here because he appears concerned primarily with identifying bad decisions and fashioning paternalist responses to them. *See infra* text accompanying notes 333–38.

paternalist policies as well. It is difficult to promote welfare when we do not know what it is, and difficult to help people make good decisions when we cannot easily tell the good from the bad. I will discuss this problem in greater depth below, regarding the normative work of behavioral economics.

Emotional irrationalists themselves have recognized that their view is not parsimonious, primarily because they do not attempt a consistent account of decision making, instead addressing problems for rational choice theory piecemeal.²⁹⁸ This is problematic because it creates the risk that policy makers will reach inconsistent conclusions and promote inconsistent policies. A more fundamental problem is the division of decision making into several types—such as cognitive versus emotional and rational versus irrational—without a clear means of distinguishing the two and without an empirical basis for the rational, non-emotional decision making that emotional irrationalism prioritizes. As this Article has detailed, mounting evidence suggests that affective processes are critical to all decisions; however, emotional irrationalism holds not only that some decisions are unemotional, but also that unemotional decisions are generally better than emotional decisions.²⁹⁹ While psychologists are finding nonconscious affective processes so robust and effective as to call into question the necessity of conscious thought,³⁰⁰ and while neurobiologist Antonio Damasio writes that “[f]eelings of pain or pleasure or some quality in between are the bedrock of our minds,”³⁰¹ a behavioralist ponders whether “some kind of ‘affect’” is “a necessary or sufficient condition for fear.”³⁰²

298. See, e.g., Jolls, Sunstein & Thaler, *supra* note 39, at 1545.

299. My point here should not be taken as an argument against all dual-process theories, which are common in psychology. Behavior relies on numerous processes that can be grouped into a number of binary categories, such as conscious and nonconscious or automatic and controlled. The point is that it is mistaken to claim that any particular decision is, or should be, *unemotional*. It is probably accurate, however, to speak of two types of emotional decisions: (1) those that flow more directly from environmental stimuli and (2) those that are mediated more by knowledge structures and other sources of affect such as other long-term goals and motivations. See, e.g., Bechara & Damasio, *supra* note 159, at 340 (distinguishing “primary” and “secondary” causes of the affective building blocks of decisions). The latter kind of emotional reasoning corresponds more with our intuitive notion of “reasoned” thought.

300. See *supra* text accompanying notes 102–69.

301. DAMASIO, SPINOZA, *supra* note 106, at 3.

302. SUNSTEIN, FEAR, *supra* note 7, at 3. Sunstein states on the same page, “I understand fear to depend on some kind of judgment that we are in danger.” *Id.* (citing MARTHA C. NUSSBAUM, UPHEAVALS OF THOUGHT: THE INTELLIGENCE OF EMOTIONS 48

2. Emotional irrationalism and risk regulation

As a normative matter, emotional irrationalism maintains rational choice theory's goal of maximizing welfare. However, because people often cannot be trusted to attain welfare themselves, policy makers must find a way to ascertain authentic preferences and help people make good decisions. As a result, irrationalists are preoccupied with paternalism, debating how, when, and how much policy makers should interfere with individual decisions.³⁰³ The principal problem for emotional irrationalism is that it lacks a coherent definition of welfare on which to base policy and lacks a reliable means of distinguishing good decisions from bad. In this section, I explore Cass Sunstein's work on risk regulation in the book *Laws of Fear* as an example of emotional irrationalism, using it to argue that the approach is normatively incoherent and risky for public welfare.

Sunstein argues that the public is emotionally irrational in assessing risk; therefore, risk regulation policy should be set, for the most part, by insulated experts who adhere to more "rational" analyses.³⁰⁴ We should be wary of this approach not because it would place decisions in the hands of experts who purport to know better than the public, which is inevitable unless we regulate through direct democracy, but rather because it is mistaken about the role of emotion in policy judgment. If all decision making is emotional at its core, as the evidence suggests, then Sunstein is mistaken to think that experts make objective judgments whereas others make "emotional" judgments. Sunstein also seems not to notice that he has no definition of welfare on which experts can base their analyses. In effect, he inadvertently promotes policy making by experts who make decisions based on their own values rather than the public's.

(2002)). This view actually has much more in common with emotional rationalism, discussed below, than emotion irrationalism.

303. See, e.g., Blumenthal, *Emotional Paternalism*, *supra* note 297; Colin F. Camerer et al., *Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism"*, 151 U. PA. L. REV. 1211, 1211 (2003); Edward L. Glaeser, *Paternalism and Psychology*, 73 U. CHI. L. REV. 133, 136 (2006); Jolls, Sunstein & Thaler, *supra* note 39, at 1541 (styling their approach as "a sort of anti-antipaternalism"); Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism*, 93 AM. ECON. REV. 175, 175 (2003).

304. SUNSTEIN, *FEAR*, *supra* note 7, at 68. Sunstein's perspective is similar to Justice Breyer's. See STEPHEN G. BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* 33-39, 59-61 (1993).

As an initial matter, Sunstein makes numerous questionable distinctions between “rational” and “emotional” judgments. For example, he sees an emotional mistake in people’s greater aversion to a risk of cancer death “described in vivid terms[] as ‘very gruesome and intensely painful’”³⁰⁵ than to the same risk of cancer death not so described.³⁰⁶ But this is irrational only if we assume that people should care about absolute numbers of deaths without any concern for whether the deaths are particularly painful,³⁰⁷ an assumption on which Sunstein himself casts doubt elsewhere.³⁰⁸ Sunstein also adjudges that people ought to be willing to pay more per life saved from catastrophic risks than from risks that implicate fewer deaths.³⁰⁹ It is not obvious that this approach is any more “rational” than paying an equal amount to prevent all deaths.

These examples highlight our tendency to deem other people’s judgments emotionally flawed while viewing our own equally emotional judgments as “rational”—in short, to slip into using the word “rational” to mean something with which we agree—a phenomenon I term the *emotional attribution error*. This type of error provides a window into a core problem for “libertarian paternalism”³¹⁰ and “asymmetric paternalism,”³¹¹ which are emotional-irrationalist approaches meant to answer libertarian or anti-paternalist concerns by promoting paternalism only where it interferes with “irrational” and not “rational” decisions.³¹² Emotional irrationalists often cannot tell the two apart, often for the simple reason that the distinction is false.³¹³ Although particular attempts to achieve policy goals can be irrational, for example

305. SUNSTEIN, FEAR, *supra* note 7, at 77.

306. *Id.* at 77–79.

307. Or if we assume that all cancer deaths are “very gruesome and intensely painful” and that all people know this.

308. *Id.* at 149 (“Of course different valuations would be justified if they stemmed from the nature of the risk . . .”).

309. *Id.* at 161.

310. *See id.* at 175; Thaler & Sunstein, *supra* note 303, at 175.

311. *See* Camerer et al., *supra* note 303, at 1212.

312. *See, e.g.*, SUNSTEIN, FEAR, *supra* note 7, at 200 (“The justification . . . will depend on whether there are serious problems of bounded rationality and bounded self-control.”).

313. Again, this is not to suggest that there are no useful distinctions among decisions or that we will never find cause to prioritize some over others. *See supra* text accompanying notes 285–86. It is only to say that emotional irrationalism takes an undertheorized approach to this question.

because they are inconsistent or contradict the evidence on how to achieve them, judgments of what goals to pursue are not rational to begin with. If all decisions, and therefore all policy judgments, have an irreducibly emotional component, then all contain some a-rationality. If this is the case, then what rational or objective basis can experts use in policy making?

Sunstein proposes a cost-benefit analysis in which policy makers attempt to save the greatest number of lives per dollar.³¹⁴ But this is not obviously more rational than a policy that recognizes other concerns. Imagine a choice between a policy that saves more lives per dollar but renders most people miserable and one that results in more deaths but far greater joy among the living. Opinions would vary widely on which policy is preferable,³¹⁵ and expert scientists would not be able to resolve the question objectively.³¹⁶ Sunstein barely discusses this type of problem and does not attempt a solution, even though such tradeoffs are the core value judgments involved in risk regulation.³¹⁷ To be sure, Sunstein states that cost-benefit analysis is just a tool to promote clear thinking, and that “[p]articipants in a democratic society may choose to proceed even when the costs exceed the benefits.”³¹⁸ But by focusing primarily on rationalizing risk regulation with cost-benefit analysis, he often misses the most difficult questions: what counts as a cost or a benefit, and how do we value these things?³¹⁹

Sunstein’s answer is to rely on revealed preferences,³²⁰ an odd approach given how much he has destabilized the concept of preferences. Although Sunstein recognizes that preferences are so

314. SUNSTEIN, FEAR, *supra* note 7, at 129–48.

315. And they vary for *emotional* reasons worth respecting, not reasons we can dismiss easily as “irrational.” See Dan M. Kahan et al., *Fear of Democracy: A Cultural Evaluation of Sunstein on Risk*, 119 HARV. L. REV. 1071, 1072 (2006) (reviewing SUNSTEIN, FEAR, *supra* note 7).

316. See generally FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING (2004).

317. See SUNSTEIN, FEAR, *supra* note 7, at 149 (noting in passing that “different valuations [for statistical lives] would be justified if they stemmed from the nature of the risk or the affected population—and of course we need an account that justifies one assignment of monetary equivalents rather than another.”) (emphasis added).

318. *Id.* at 130.

319. For an excellent challenge to cost-benefit valuations in health and environmental regulation, see ACKERMAN & HEINZERLING, *supra* note 316, at 41–60.

320. See SUNSTEIN, FEAR, *supra* note 7, at 131 (“The idea is that governments assign monetary values to risks by asking what monetary values ordinary people assign to risks.”).

contextual and often mistaken that the very meaning of the term is “unclear,”³²¹ and although he argues that mistaken decisions are not worthy of respect,³²² he grounds much cost-benefit analysis in revealed preferences in the form of people’s stated willingness to pay to avoid risks of death.³²³

This paradox is striking. In the same book, Sunstein is dismissive of preferences on matters such as savings rates, stating, “The false assumption is that almost all people, almost all of the time, make choices that are in their best interest or at the very least are better, by their own lights, than the choices that would be made by third parties.”³²⁴ When it comes to valuing human life, however, he ignores this problem. After a short discussion of miswanting and adaptive preferences, he quickly dismisses them, stating, “[m]uch of the time, there is no reason to believe that the use of informed WTP [willingness to pay] (say, \$100) is a product of adaptive preferences. When there is such a reason, the judgment about the Easy Case must be revised.”³²⁵ Sunstein does not provide evidence for the claim that we rarely need to be concerned with these problems and does not explain how to revise the analysis when miswanting and preferences are present. The inconsistency on this matter becomes more explicit many pages later, in a separate chapter. There, Sunstein identifies willingness to pay as a model circumstance in which “it is extremely difficult for contingent valuation studies to avoid constructing the very values that they are supposed to discover”³²⁶ and notes, “[i]t is

321. *Id.* at 176, 203 (“In such domains, it is unhelpful to say that regulators should simply ‘respect preferences.’ What people prefer, or at least choose, is a product of starting points and default rules.”).

322. *Id.* at 137 (“Even more fundamentally, the relevant numbers [on value of statistical lives] deserve respect only if they are not a product of an absence of information and bounded rationality on the part of the people whose choices generate them.”).

323. *Id.* at 129–74. Kaplow and Shavell display a similar problem. They oppose according weight to social norms independent of whether people desire them emotionally. *See* Kaplow & Shavell, *supra* note 8, at 988. They also believe social norms are rooted in some form of emotional appeal. *Id.* at 1021–27. Thus, they argue on the one hand that people’s liking of social norms does not mean we should codify them into law and, on the other, that we should codify into law whatever people like.

324. SUNSTEIN, FEAR, *supra* note 7, at 178.

325. *Id.* at 155. His dismissal of inadequate information and bounded rationality is nearly identical. *Id.* at 156 (“In many cases, however, WTP is not a result of inadequate information and bounded rationality is not leading people to err. If it is, appropriate adjustments should be made.”).

326. *Id.* at 190.

not clear how those interested in eliciting (rather than affecting) values might respond to this problem.”³²⁷

Are people’s judgments to be trusted or not? Are revealed preferences reliable or not? Because emotional irrationalism stands with one foot in rational choice theory and the other in a more situational perspective on emotion, Sunstein has it each way at various times. First, he argues that people’s emotions cause them to make bad choices in many instances; and thus, emotionless experts should make most decisions for them. Then, he abandons these claims in some contexts and seeks to base policy in part on revealed preferences, a self-defeating approach if one takes his criticism of decision making seriously—as we should.

Moreover, a critical realist perspective of the evidence shows that the problem with preferences is probably much worse than Sunstein suggests. Preferences are not merely susceptible to a few biases, however troubling; they appear to be so deeply contextual that they cannot be taken as authentic expressions of value. This can be illustrated in one of Sunstein’s principal applications of revealed preferences—using people’s stated willingness to pay to prevent risks to their own lives to guide government spending on risk precautions. Sunstein’s analysis leads him to conclude that experts should spend less to save poor people’s lives than rich people’s.³²⁸ If the poor are willing to pay twenty dollars to save their lives and the rich are willing to pay sixty dollars, as the argument goes, then regulators should value their lives accordingly.³²⁹ But a situationist perspective on emotion recognizes that currency, like everything else, has only a relative, contextual value. A poor person will spend fewer dollars to save her life because a dollar means more to her than to a rich person—not because she values her life less. Given the unlikelihood that poor people place a lower value on their own lives, the example says more about the comparative value of money than the comparative value of life.³³⁰

327. *Id.* at 192.

328. *Id.* at 162–63.

329. *Id.* (“[G]overnment should not force poor people to buy more than their WTP to eliminate statistical risks.”).

330. The relative values of actual currencies provide a useful analogy. Imagine a sweater that costs \$60 and £30. These prices tell us about the relative value of American and British currency, not the relative value of sweaters to Americans and Brits. From a situationist

The emotional attribution error and the absence of a welfare theory in emotional irrationalism explain why emotional irrationalists offer paternalist responses to decision-making problems primarily where intuitively appealing policy metrics and responses come readily to mind. For example, a principal area in which irrationalists have promoted libertarian paternalism is in retirement savings, where there is widespread belief that American workers save too little and that increased savings would benefit them.³³¹ Likewise, in risk regulation, many of us intuitively agree that we should maximize the number of lives saved per dollar—that is, until we think about hard cases. In another example, Samuel Issacharoff and his colleagues describe their skepticism of paternalism as deriving in part from the “common intuition that people may have an intrinsic taste for free choice”³³² without responding to the wealth of evidence that this “taste” may be an example of miswanting. In these instances, we fail to notice that there are policy judgments to be made and that we often lack a basis for assuming that intuitive solutions are best.

Conversely, irrationalists shy away from the implications of their work on emotion where no appealing paternalist approach comes to mind or where consequences of paternalism seem jarring and frightening.³³³ For example, after an excellent survey of empirical evidence on people’s remarkably quick recoveries from emotional losses, Jeremy Blumenthal ponders whether our tort system over-compensates victims and over-deters conduct based in mistaken

perspective, even a single currency—or any other object, for that matter—has multiple values when it is held by different hands in different circumstances.

It is revealing that Sunstein agrees with this situational analysis on the scale of rich and poor *nations*. There, he states that it would be “ludicrous as well as offensive” to assume that differences in willingness to pay reflect differences in the value of lives. *Id.* at 164. In wealthy countries, however, he maintains that regulators’ use of willingness to pay “respect[s] people’s autonomy.” *Id.* at 165. If inequality that results in varying willingness to pay bothers us—and it bothers Sunstein, *id.* at 166—then the solution is wealth redistribution, something exogenous to risk regulation. *Id.* at 169. But surely Sunstein does not believe that we can or should redistribute wealth to the point of creating anything close to actual equality. So the problem remains: if differences in wealth (not to mention other situational factors) persist, then willingness to pay is not a reliable basis for policy.

331. *See, e.g., id.* at 175–76. Sunstein and Thaler advocate opting workers into retirement savings plans automatically because this change in the default position increases savings rates dramatically. *See id.*

332. Camerer et al., *supra* note 303, at 1214 n.11.

333. Sunstein’s willingness-to-pay analysis is exceptional in this regard and much more akin to a typical rational choice analysis.

predictions of future suffering.³³⁴ However, he quickly distances himself from that conclusion³³⁵ because he “share[s] the entirely plausible and legitimate intuition, reified by the legal system, that when an individual is injured, and is reasonably certain to experience harm from that injury in the future, that individual deserves recompense.”³³⁶ Blumenthal also displays the emotional-irrationalists’ problematic treatment of welfarism by noting that “we can never be sure how to maximize happiness or minimize unhappiness”³³⁷ but nonetheless endorsing paternalism with little attention to this problem, recommending that paternalists add “emotional ‘errors’” to the list of “cognitive errors” that they try to cure.³³⁸

In sum, emotional irrationalism is correct on some important points—namely that decision making is often emotional and that emotions may lead to irrational decisions, at least in terms of consistency and propriety. However, emotional irrationalists fail to see that emotion is critical to *all* decisions. Thus, they miss many instances of emotion in decision making, fail to see that we must take care not to dismiss all emotional judgments too quickly, and fail also to see that even expert decisions rely on emotional judgments. Emotional-irrationalist debates over paternalism are misguided, focusing on the choice between people’s “rational” and “irrational/emotional” selves without seeing that the putatively

334. See Blumenthal, *Affective Forecasting*, *supra* note 4, at 182–86.

335. See *id.* at 187 (“I should make one point explicit. I do not intend by any of this discussion to imply that tort victims do not deserve compensation for their injuries, even intangible ones, or should not be awarded damages for future pain and suffering or emotional distress.”).

336. *Id.* Blumenthal provides three other reasons for declining to reduce victim compensation, but in my view they do not add much to the discussion. First, he notes that victims will experience *some* future emotional harm, and the question is really how much. This fails to support his proposition because it counsels only against eliminating compensation altogether, not against reducing it even drastically. Second, Blumenthal states that the affective forecasting literature is too young to be applied without reservation. But his whole discussion is about the implications for law if that evidence *is* trustworthy. Finally, he states that our legal system is committed to “values other than the application of data” such as “finality, fairness, process, or constitutional principles.” *Id.* at 187–88. But he immediately folds this point back into his original intuition that tort victims should be compensated: “Here, we value the compensation of tort victims, and may continue to do so even in the face of contradictory evidence.” *Id.* at 188.

337. *Id.* at 231.

338. *Id.* at 237.

“rational” selves are always emotional to some degree.³³⁹ Emotional irrationalism retains emotion as the object of decision making and policy but has destabilized the definitions of “preferences” and “welfare” so much that it is flying blind. Without a coherent definition of welfare, emotional irrationalists address decision-making problems mostly where intuitively appealing, non-frightening solutions happen to present themselves.

C. Cultural Cognition or Emotional Rational Choice Theory

In light of the empirical evidence on emotion in decisions, surely not all legal theorists view emotions as bad in all instances, right? Right. Proponents of a more recent view called “cultural evaluator theory” argue that emotion is critical to rational decisions.³⁴⁰ We can call this view *emotional rational choice theory* or *emotional rationalism*. In its most important claims, emotional rationalism is accurate and useful. However, its account of emotion is unempirical and confused, namely in its suggestions that decisions are generally rational and that emotions are products of reason.³⁴¹ Moreover, its proponents appear ambivalent about the theory’s legal implications.

1. Emotion and rationality

Cultural cognition theory views emotion as integral to most, if not all, decisions and views this as good. Its core claim is that people’s attitudes and behavior are predicted by their cultural

339. Kahan and his colleagues advance a similar criticism but believe that emotions are rational, *see infra* text accompanying notes 340–88, and do not necessarily recommend a solution different from Sunstein’s. Kahan et al., *supra* note 315, at 1105–07.

340. *See, e.g.*, Dan Kahan, *Two Conceptions of Emotion in Risk Perception*, 156 U. PA. L. REV. 741 (2008).

341. I have had difficulty providing a coherent account of cultural cognition theory. The theory is relatively new, with too little writing about it and too little response from other scholars. Additionally, its proponents have made inconsistent statements on issues that this Article addresses. It is my hope that this Article will spur useful discussion and clarification. Where there is an inconsistency, I emphasize in the text of this Article the statements by cultural cognition theorists that correspond to what I call emotional rationalism because these statements provide something unique in the legal literature on emotion. Other statements look basically like emotional *irrationalism*, treating “culture” as another bias that impedes rational thought. I note examples of these statements in footnotes. One cannot help guessing an explanation for the discrepancy. It appears to me that Dan Kahan, the leading cultural cognition theorist, leans more toward rationalism than his coauthors, who lean more toward irrationalism. This is because the strongest statement of emotional rationalism is in an article Kahan authored alone. *See id.*

worldviews³⁴²—which means their emotions and emotion-laden knowledge structures. According to emotional rationalism, emotion is involved in all decisions because it informs people of the value judgments which they use to make decisions. Apparently, people make value judgments at some prior time; then, emotions reveal those judgments to them in moments of decision.³⁴³ Emotions are “expressively rational”³⁴⁴ in that they reflect, and allow people to perceive, what coheres with their core values.³⁴⁵

Emotional rationalism thus takes a strong position on rationality, holding that emotions generally reflect consistent, authentic preferences.³⁴⁶ This is not to say that decisions are always correct but rather that they are never hopelessly irrational. When emotions are wrong, it is not because they clash with an individual’s authentic values. That is the emotional-irrationalist definition of irrationality, not the emotional-rationalist definition. It is because the underlying values themselves are wrong. Because “emotions express cognitive evaluations . . . [they] can and should be evaluated as true or false, right or wrong, reasonable or unreasonable, in light of the moral correctness of the values those emotions express.”³⁴⁷ In sum, emotional rationalism views emotions as windows into underlying rational judgments.

342. See, e.g., Kahan et al., *supra* note 315, at 1083–84.

343. See Kahan, *supra* note 343, at 752 (“[E]motions perform a unique role in enabling her to identify the stance that is expressively rational for someone with her commitments. Without the contribution that emotion makes to her powers of expressive perception, she would be lacking this vital incident of rational agency, no matter how much information, no matter how much time, and no matter how much computational acumen she possessed.”).

344. *Id.*

345. *Id.* at 750–51.

346. This is one area where cultural cognition theorists have been inconsistent. Elsewhere, Don Braman and Dan Kahan have written that cultural cognition is a “bias” that inhibits proper thinking. See, e.g., Dan M. Kahan & Donald Braman, *Cultural Cognition and Public Policy*, 24 YALE L. & POL’Y REV. 149, 164–68 (2006) [hereinafter Kahan & Braman, *Public Policy*].

347. Kahan, *supra* note 340, at 762–63; see also *id.* at 764 (“[T]he view that emotions are ‘judgments of value’ has also been affiliated with the position that emotions can be educated. The type of instruction this approach contemplates, however, consists not in a stoic program of disciplining the mind and strengthening the will to resist the supposedly corrupting influence of emotion on judgment. Instead, it has involved a species of *moral* instruction that reforms a person’s emotional apprehension of the social meanings that unjust or destructive states of affairs and courses of action express.”).

2. *Emotional rationalism's empiricism*

Cultural cognition theorists are right about a lot—particularly that all decisions likely have an emotional component and that we should take care not to dismiss too many emotional decisions as undeserving of respect. Cultural cognition theory is realist and situationist in its core claim that emotion and emotionally mediated knowledge structures (“cultural worldviews” in the language of cultural cognition theory) deeply influence cognitive processing, attitudes, and behavior.³⁴⁸ This means that people pay attention to, believe, and remember, information that coheres with and reinforces their worldviews; they trust information from others who they believe share their values and distrust information from those who they believe have opposing values.³⁴⁹ In short, “[c]ulture is prior to facts.”³⁵⁰ This generally accords with my review of the psychology literature.³⁵¹

Cultural cognition is also critically realist in its recognition that (1) everyone—including experts, policymakers, and the researchers identifying emotion’s role in decision making—is subject to the phenomena being documented, which makes it difficult to find neutral, accurate answers; and that (2) even when we succeed in finding true answers to some questions, culturally constrained (or “biased,” in their words) thinking may prevent the dissemination of and convergence around this information.³⁵² Cultural cognition theorists are also right to point out the necessity and value of emotion in decision making and to suggest that we should not be so quick to dismiss emotional attitudes and behavior as irrational rather than as expressions of something worthy of respect in a democratic society.³⁵³

An exemplary application of the theory is a recent piece in which Don Braman and Dan Kahan argue that much of the debate over gun control is misguided in its focus on consequentialist arguments

348. See Kahan & Braman, *Public Policy*, *supra* note 346, at 157–60.

349. *Id.* at 155–56.

350. *Id.* at 150.

351. See *supra* Part III.

352. See, e.g., Kahan et al., *supra* note 315, at 1105–07; Kahan & Braman, *Public Policy*, *supra* note 346, at 166–68.

353. See Kahan et al., *supra* note 315, at 1105–06.

about public safety.³⁵⁴ Braman and Kahan provide evidence that, for most members of the public with strong feelings about gun control, the debate is not about public safety; it is about conflicting visions of human social and political organization.³⁵⁵ People oriented toward hierarchy and individualism are more likely to oppose gun control, while people oriented toward egalitarianism and solidarity are more likely to support it.³⁵⁶ These cultural orientations filter the information to which people pay attention, moderate which information they credit and discredit, and, ultimately, exert strong influence over their policy views.³⁵⁷ Indeed, cultural orientations predict people's views better than any other factor, including measures of race and geography.³⁵⁸ In Braman and Kahan's words, "These dynamics help to explain the persistent ineffectiveness of empirical data in the American gun debate."³⁵⁹

Despite making these valuable observations, emotional rationalism is oddly mistaken about the precise role of emotion in decision making. In particular, the claim that emotions reflect reasoned judgments no doubt captures an important aspect of emotion—that emotions are sometimes products of thought and even effort—but it is incomplete. To the extent that emotional rationalism holds that one cannot have emotions without cognitive judgments, or that emotions are always products of reasoned choice, these views are out of step with mainstream social psychology.³⁶⁰

354. See Don Braman & Dan Kahan, *Overcoming the Fear of Guns, the Fear of Gun Control, and the Fear of Cultural Politics: Constructing a Better Gun Debate*, 55 EMORY L.J. 569, 571–80 (2006).

355. *Id.* at 571, 582–86.

356. *Id.* at 578–79.

357. *Id.*

358. *Id.* at 579.

359. *Id.* at 580.

360. Not to mention mainstream legal scholarship. Emotional irrationalism and rational choice theory, for example, recognize that emotion *makes* at least some decisions and dispute only how common the phenomenon is. The mainstream view in social psychology is that emotion can be wholly distinct from, and precede, reason, see, e.g., Zajonc, *Closing the Debate*, *supra* note 166, at 31–33, and that emotion appears to influence and shape many, if not most, cognitive or "reasoning" processes, see generally FEELING AND THINKING, *supra* note 15.

Kahan's cognitivist approach appears to derive not from psychology or neuroscience but rather from the philosophy of Martha Nussbaum. Kahan wrote an article with Nussbaum in 1996 propounding the view, see Dan M. Kahan & Martha C. Nussbaum, *Two Conceptions of Emotion in Criminal Law*, 96 COLUM. L. REV. 269 (1996), and continues to rely heavily on her work. See Kahan, *Two Conceptions*, *supra* note 340, at 742, 749–50. The 1996 article pitted an emotional-rationalist-like view of emotion against what strikes me as nearly a

In holding that emotion does not make (or help make) decisions but rather enables people to perceive previously made value judgments,³⁶¹ emotional rationalism scrubs away emotion's evaluative function and molds it back into an object of rational, emotionless judgments. In this manner, the account looks like a restatement of rational choice theory with "emotion" more explicitly playing the role of "preferences" and "welfare." Emotion is critical to decisions under emotional rationalism in the manner that preferences are critical to decisions under rational choice theory: there can be no decisions without decision inputs. This structural similarity renders emotional rationalism's theoretical account subject to many of the criticisms of rational choice theory—that decisions are often not rational or welfare enhancing and that emotion has a substantial, perhaps indispensable, role in the process of decision making.

Yet emotional rationalism has deeper problems. Foremost, the theory does not explain the roots of the pre-emotional value judgments on which it depends. If emotions reveal previously made, reasoned value judgments,³⁶² then we need an explanation of who or what makes these judgments. Rational choice theory and behavioral economics do not have this problem because they assume

caricature of automatic, nonconscious emotion, see Kahan & Nussbaum, *supra*, at 273–75, claiming victory for emotional rationalism just as it was becoming untenable in the psychology literature, compare Zajonc, *Closing the Debate*, *supra* note 166 and FEELING AND THINKING, *supra* note 15. Philosophers, too, have found Nussbaum's account flawed. See, e.g., Simon Blackburn, *To Feel and Feel Not*, NEW REPUBLIC, Dec. 24, 2001, at 36 ("Nussbaum writes as if there were only one kind of rival to the cognitive account: a view that simply adds sensations or bodily feelings onto the cognitive appraisal. . . . [Her theory] makes emotions intelligent, susceptible of justification, and even . . . true or false. . . . This is a disappointingly cavalier way of drawing up the options, especially from someone who has studied eighteenth-century moral philosophy.").

Kahan's attempts to marshal empirical support from psychology and neuroscience demonstrate only that the evidence is not inconsistent with his theory, not that the evidence supports his theory. For example, regarding Damasio's evidence that emotion is crucial to decision making, see Kahan, *Two Conceptions*, *supra* note 340, at 750 (citing DAMASIO, DESCARTES' ERROR, *supra* note 149, at 173–83), and *supra* notes 337–39 and accompanying text. Kahan notes, "If *being* rational consists, at least in part, of 'see[ing] which values [we] hold' and knowing how to 'deploy these values in [our] judgments,' then 'those who are unaware of their emotions or of their emotional lacks' will necessarily be deficient in a capacity essential to being 'a rational person.'" Kahan, *Two Conceptions*, *supra* note 340, at 750 (quoting MICHAEL STOCKER & ELIZABETH HEGEMAN, VALUING EMOTIONS 105 (1996)).

361. Kahan, *Two Conceptions*, *supra* note 340, at 752.

362. *Id.* at 752, 764.

preferences are given rather than chosen, regardless of their propriety. Kahan's claim that decision inputs are products of reason is difficult to conceptualize without assuming that people are spirited by immaterial agents who exercise choice for them—a discredited and unempirical notion.³⁶³

Emotional rationalism is also non-parsimonious in that it fails to account for attitudes and behavior outside the realm of risk perception. For example, emotional rationalism apparently would hold that racial prejudice is either an authentic expression of core values entitled to respect or evidence of an incorrect reasoned judgment that can be righted through rational discourse. Although viewing racial prejudice as an incorrect value judgment has some intuitive appeal, it is doubtful that this represents a complete picture of the phenomenon or that reasoned discourse alone would remedy it.³⁶⁴ Similarly, emotional rationalism has nothing to say about miswanting problems and empathy gaps—widespread evidence that our thoughts about our emotions are often mistaken.³⁶⁵

It should be apparent that emotional rationalism's cognitivist account of emotion also creates an internal inconsistency: on the one hand, emotional value judgments are products of reason; on the other, cultural worldviews (which are essentially emotional) have an overwhelming influence on the reasoning process. Likewise, in public policy, Kahan maintains that value judgments can be righted when wrong because they are reasoned, but that value conflicts are intractable because they are based on cultural worldviews that exert a high degree of control over reasoning.

363. See, e.g., STEVEN PINKER, *THE BLANK SLATE: THE MODERN DENIAL OF HUMAN NATURE* (2003). Emotional rationalism, like rational choice theory, also fails to explain the assumption that decisions are generally *correct*. This is in contrast to emotional irrationalism, which holds that decisions are often incorrect but fails to provide a basis for its paternalistic interventions.

364. To the contrary, a large volume of evidence suggests that racial prejudice is both generated and expressed beyond our perception, automatically and nonconsciously, and is difficult to perceive, much less to reason with. See *supra* notes 102–06 and accompanying text.

365. Emotional rationalism's model also engages without sufficient explanation in a peculiar human exceptionalism. We expect other animals to lack the self-consciousness and reasoning ability upon which decision making depends in the emotional rationalist account. But if this is the case, then how do they make decisions? In fact, some proponents of emotional rationalism have doubled down on the theory on this point, making dubious claims about animal cognition, such as arguing that animals have schemes of goals and projects derived from reasoning about their own flourishing. See Blackburn, *supra* note 360, at 38 (criticizing Nussbaum's humanization of emotions).

The solution to these problems is to drop the unempirical dead weight in cultural cognition theory—emotional rationalism, which holds that people’s value judgments are somehow “rational,” reasoned, or chosen. With a more realistic vision of emotion, cultural cognition theory would be more realistic, parsimonious, robust, and useful. Indeed, notwithstanding its shortcomings on the relationship between emotion and rationality, cultural cognition theory is correct in its core contentions. Ample evidence supports the claim that decisions are constituted from emotional motivations and status concerns and that information is processed through emotionally mediated knowledge structures³⁶⁶—a highly realist and situationist account of attitudes and behavior similar to the one I promote.

3. Cultural cognition and risk regulation

Cultural cognition theorists are ambivalent about the normative implications of their work, perhaps as a result of under-developed and sometimes mistaken views on emotion, rationality, and welfare. Although they apparently take some form of welfarism as their goal,³⁶⁷ they are unclear on whether they believe cultural cognition theory will provide answers to policy disputes, will improve political debate so that the democratic process can yield answers itself, or will merely assist experts and politicians in selling policies.³⁶⁸ They seem to waiver between suggesting that policy problems have correct answers on which people will converge, once the debate is improved, and saying that policy conflict is intractable. In parallel, they waiver between populism and paternalism.

Cultural cognition’s emotional rationalist element makes it appear strongly populist at times. For example, it holds that experts have little or no special competence to resolve policy disputes because they demonstrate many of the systematic cultural biases found in non-experts³⁶⁹ and that everyone’s emotions are entitled to respect because they are generally rational and, when incorrect, may

366. See Kahan et al., *supra* note 315, at 1089–96; see also *supra* notes 342–47 and accompanying text.

367. See, e.g., Kahan & Braman, *Public Policy*, *supra* note 346, at 149.

368. See, e.g., Kahan et al., *supra* note 315, at 1107; Kahan, *Two Conceptions*, *supra* note 340, at 765 (“[I]nformation about risks must be framed in a way that *affirms* rather than denigrates recipients’ cultural identities; to make it possible for persons of diverse cultural persuasions to experience that affirmation simultaneously . . .”).

369. See Kahan et al., *supra* note 315, at 1105–06.

be righted through reasoned discourse.³⁷⁰ This stance on the rationality of emotions seems to suggest that people eventually will converge on “true” answers to policy questions. However, Kahan disclaims allegiance to “pro-market or populist programs of risk regulation,”³⁷¹ and he and his colleagues are ambivalent about the possibility of political consensus.³⁷² They view political debates as “status conflicts” between competing cultural groups³⁷³ and fear that deliberative democracy could harm individuals by subjecting them to open “cultural imperialism.”³⁷⁴

Cultural cognition theorists have three answers to this problem, which, loosely speaking, can be labeled an emotional-rationalist answer, an emotional-irrationalist answer, and a situationist answer, respectively. First, if culture-based policy conflicts are intractable, then Sunstein’s insulated-experts model might be a better means of regulating risk because its superficially neutral analysis masks and mutes potentially harmful cultural conflict.³⁷⁵ This position is more surprising than Sunstein’s. Cultural cognition theorists’ emotional-rationalist tendencies lead them to believe that ordinary people’s emotional value judgments are rational and worthy of respect in a democracy.³⁷⁶ They also recognize that experts cannot make policy without making value judgments and that they will do so in the same culturally determined manner as non-experts.³⁷⁷ Yet cultural cognition theorists will consider demurring to what they view to be

370. *See id.* at 1105 (“When expert regulators reject as irrational public assessments of the risks associated with putatively dangerous activities . . . they are in fact overriding public values. For just as citizens’ perceptions of the benefits of these activities express their worldviews, so too do their perceptions of the risks they pose.”); Kahan, *Two Conceptions*, *supra* note 340, at 760–63.

371. Kahan, *Two Conceptions*, *supra* note 340, at 762.

372. Kahan et al., *supra* note 315, at 1100–01.

373. *Id.* at 1095.

374. *Id.* at 1107 (“At the same time that [cultural cognition theory] extinguishes one ground for interfering with market and political evaluations of risk—that lay sensibilities are irrational—[it] arguably creates another: that those sensibilities sometimes reflect an unjust desire to use the expressive capital of the law to advance culturally imperialist ends.”). Note that this is a confession either that emotions are not always capable of being reasoned with and corrected, or that even if they are, there are multiple “correct” emotions.

375. *Id.* at 1108 (“[Emotional irrationalism’s] analytic deficiencies can be seen as conflict-abating discourse virtues: precisely because it ignores the decisive role that cultural values play in shaping competing perceptions of risk, that theory mutes the function that risk regulation plays in adjudicating between competing worldviews.”).

376. *Id.* at 1104–05.

377. *Id.* at 1092–94, 1105–08.

phony expert paternalism. It is one thing to adopt the emotional-irrationalist approach of labeling certain values bad for welfare and attempting to substitute better ones; it is quite another to hold that all public values are entitled to respect but sometimes should be ignored and muted. Kahan and his colleagues accuse Sunstein in no uncertain terms of being afraid of democracy, but they may be equally if not more afraid,³⁷⁸ and they contemplate settling for a role as communications specialists for paternalists.³⁷⁹

Second, Braman and Kahan suggest “debiasing” public policy debates by reducing the harmful effects of cultural cognition on rationality.³⁸⁰ In this respect, their writings are more emotional-irrationalist than emotional-rationalist. Although they argue elsewhere that policy problems irreducibly turn on value judgments about which people will never agree,³⁸¹ here Braman and Kahan seem to suggest that policy questions may have “true” answers, or at least answers on which people will converge if their thinking can be rationalized.³⁸² This answer suffers from a problem discussed regarding emotional irrationalism: a conflation of what we might call questions of policy fact with questions of policy judgment. Although it is correct that emotion and knowledge structures moderate our processing of empirical knowledge, it is also true that, even when we have good knowledge, we still must make value judgments about policy.³⁸³ Kahan and Braman no doubt understand this, but much of their work curiously focuses on “debiasing” the debate on policy facts with too little acknowledgement that this answers only one part

378. *See id.* at 1106. Emotional irrationalists fear democracy only inasmuch as people make bad choices; emotional rationalists apparently fear democracy even when people’s choices are good.

379. *See id.* at 1107–09.

380. *See* Kahan & Braman, *Public Policy*, *supra* note 346, at 164–66.

381. *See* Braman & Kahan, *Fear of Guns*, *supra* note 354, at 575 (“No amount of expected utility analysis can tell us whose vision of the good society—the egalitarian’s, the hierarchist’s, or the individualist’s—to prefer.”).

382. Kahan & Braman, *Public Policy*, *supra* note 346, at 166–68 (arguing that cultural cognition biases people’s receptivity to scientific answers on “policy issues”).

383. *See infra* Part V. For example, regarding gun control, the question which gun policy results in the fewest deaths is factual, and the question how we act on the answer requires a value judgment.

of the cultural-conflict puzzle.³⁸⁴ Even assuming we can settle factual disputes, policy choices remain.³⁸⁵

Finally, Kahan and Braman advocate searching for policies that affirm multiple cultural identities at once, thereby breaking political gridlock.³⁸⁶ This approach is far more situationist in that it surrenders more to the notions that a-rational value judgments are inherent in all policy decisions and that successful policies often must mean different things to different people. This approach also has been effective and no doubt will continue to be.³⁸⁷ However, it still suffers from at least two problems. First, it cannot be expected to end policy conflict because every problem will continue to have numerous potential responses, even when we restrict ourselves to those with broad cross-cultural appeal. (Moreover, a good rhetorician can argue for any policy conclusion from any set of values. Therefore, the approach may narrow the scope of policy options much less than Kahan and Braman believe.) Second, something important has been lost along the way: Kahan and Braman propose only to lessen political conflict, not to yield good policy—a striking omission for welfarists. At times Kahan and Braman seem to suggest that experts need better messaging as much if not more than better policy.³⁸⁸ Moreover, they do not address how we can tell whether one policy is qualitatively better than another or simply has been sold more effectively. Some very bad policies may be highly saleable. It seems intuitive that lessening cultural conflict in society will enhance welfare, but not if it comes at the cost of enacting harmful policies.

My reading of Kahan and Braman suggests that they sense the problems I have identified, which is why they vacillate between suggesting that cultural cognition will help find good policy solutions, will help improve political debate, or merely help paternalists sell their policies. Much of this variation results from

384. See, e.g., Kahan & Braman, *Public Policy*, *supra* note 346, at 168–69 (suggesting that people will converge on policies when they are made receptive to empirical evidence).

385. This parallels the criticism of Sunstein’s cost-benefit analysis. Cost-benefit analysis helps only in ensuring consistent pursuit of policy goals; it does not diminish the need for judgments on what those goals should be.

386. Kahan & Braman, *Public Policy*, *supra* note 346, at 168–70.

387. *Id.* at 167–70.

388. See, e.g., Kahan, *Two Conceptions*, *supra* note 340, at 765 (“[I]nformation about risks must be framed in a way that *affirms* rather than denigrates recipients’ cultural identities; to make it possible for persons of diverse cultural persuasions to experience that affirmation simultaneously.”).

inconsistent views of emotion and rationality. For example, if emotions drive politics, emotions are generally rational, and people's emotions differ intractably, then political disputes may be intractable as well. This view leads to the pessimistic demurral to expert paternalism. On the other hand, if emotional judgments are somewhat rational but not intractably different—if they can be reasoned with or “debiased”—then all we need is better political dialogue, through which people will converge on policy solutions. The third way that Braman and Kahan suggest is to find policies that are saleable to multiple cultural groups, but this approach drops the search for welfare-enhancing policy entirely. In short, cultural cognition may suggest several means of muting political conflict, but it does not help us answer questions about what is good for individuals and society.

V. REAL EMOTION IN LAW

Finally, we can outline the view emerging from the empirical evidence, name it, and compare it to theories of emotion in law. This view holds that emotion is critical to all decisions—not because it is a decision input, but because affective processes are the very approach-and-avoidance or go/no-go processes that moderate other cognitions and drive most, if not all, behavior.³⁸⁹ Because these processes are interactions between our bodies and the environment, they are inherently context-dependent. They generally serve us well, but did not arise to make us happy.³⁹⁰ Thus, there is no reason to assume that any particular decision is rational in the sense of consistency or propriety. This is a critical realist and situationist account of emotion—critical realist because, following Jon Hanson

389. See Bechara & Damasio, *supra* note 159, at 360 (“[N]umerous and often conflicting somatic states may be triggered at the same time, but stronger ones gain selective advantage over weaker ones. . . . Thus over the course of pondering a decision, positive and negative *somatic markers* that are strong are reinforced, while weak ones are eliminated. This process of elimination can be very fast. Ultimately, an overall, more dominant, somatic state emerges (a “gut feeling” or a “hunch,” so to speak), which then provides signals to the telencephalon that modulate activity in neural structures involved in *biasing* decisions.”); *id.* at 363 (“The *somatic marker hypothesis* posits that when pondering a decision, separate thoughts . . . trigger a positive or negative somatic state. Depending on the relative strengths . . . of negative versus positive states, an *overall* somatic state will emerge that is either positive or negative.”); Zajonc, *Feeling and Thinking*, *supra* note 109, at 167–72.

390. See, e.g., Bechara & Damasio, *supra* note 159, at 353 (arguing that these processes evolved from a “fight of flight” response).

and David Yosifon's definition of that term, it attempts to derive for law and legal theory a view of emotion that reflects the best available evidence about actual human thought and behavior, with the understanding that we should be skeptical about the possibility of neutral, apolitical knowledge on the matter.³⁹¹ It is situationist because it views emotion not as a mere object of people's choices, but instead as one of a myriad of often unseen situational factors that generate human behavior. We can think of this view as *emotional situationism* or *emotional realism*.

A. Emotional Realism's Empiricism

Emotional realism squares with all the empirical evidence presented above and, in accordance with its realist goal, does not appear to be contradicted by any evidence in the literature. Also, emotional realism is the only view that explicitly takes a fully materialist, empirical approach to human behavior, assuming that the mind is composed of scientifically observable biological processes that interact with our environments and other aspects of our biology.³⁹²

Emotional realism also requires fewer (if any) dubious assumptions. Foremost, it eschews the assumption common to other theories that at least some decision making is emotionless and "rational." To illustrate the flaw in that approach, engage in the following thought experiment: imagine yourself without emotion if you can. Never mind that your life would be devoid of love, friendship, and art; imagine the effect on your decisions. Perhaps, like rational choice theory and emotional irrationalism predict, you would make better, even perfect, decisions to maximize your . . . your what? What would be your goals? Why would anything be good or bad? How would you decide anything? Why would you do anything? You wouldn't. Even the simplest decisions require an affective judgment, and even the simplest behaviors require an

391. See Hanson & Yosifon, *Situation*, *supra* note 1, at 181.

392. See DAMASIO, DESCARTES' ERROR, *supra* note 149, at 252 ("[T]he comprehensive understanding of the human mind requires an organismic perspective; that not only must the mind move from a nonphysical cogitum to the realm of biological tissue, but it must also be related to a whole organism possessed of integrated body proper and brain and fully interactive with a physical and social environment."). See generally Bechara & Damasio, *supra* note 159 (discussing the influence of emotions in economic decision making and proposing a neural model for these decisions).

affective motivation.³⁹³ Pure logic cannot make judgments or animate behavior; it can only predict consequences.

Emotional realism is also parsimonious in that it accommodates both human and other animal behavior³⁹⁴ and accords with evolutionary theory.³⁹⁵ It also could perhaps form the basis of a behavioral model. Because it describes behavior as the result of various go/no-go forces (mediated through knowledge structures and other aspects of cognition), it might even be amenable to modeling. Of course, such a model would be more complicated than a rational choice model and should be treated as purely descriptive, not as defining value.

B. Emotional Realism in the Law

Finally, we can discuss briefly what a realist view of emotion means for the law. Below, this Article outlines a few general principles, and then it sketches some potential applications.

1. General framework

a. Eschewing “emotion versus reason.” At the most general level, we should change the manner in which we conceive and discuss “emotion,” eschewing the simplistic and mistaken “emotion versus reason” dichotomy and recognizing that emotion is crucial to

393. The same is true for more complex decisions. Imagine a case so squarely controlled by legal authority that a result is dictated. Emotion is still required to decide the case. The judge adopts the result dictated by the law only because doing so is more attractive than aversive in that particular context—for example because the judge fears that the rule of law will break down if judges do not follow authority or is motivated to affirm a self-image as an impartial arbiter of law.

394. In fact, emotional realism treats human attitudes and behavior as constructed of the same building blocks that animate cellular behavior. *See, e.g.*, DAMASIO, SPINOZA, *supra* note 106, at 37–54, 144–52 (describing a unified theoretical model consisting of affective processes nested within affective processes that encompasses phenomena from basic metabolic regulation in unicellular organisms to complex decision making).

395. Zajonc, *Feeling and Thinking*, *supra* note 109, at 156 (“Affect is the first link in the evolution of complex adaptive functions that eventually differentiated animals from plants. And unlike language or cognition, affective responsiveness is universal among the animal species.”); *id.* at 169–70 (“Affect was there before we evolved language and our present form of thinking. The limbic system that controls emotional reactions was there before we evolved language and our present form of thinking. It was there before the neocortex, and it occupies a large proportion of the brain mass in lower animals. Before we evolved language and our cognitive capacities, which are so deeply dependent on language, it was the affective system alone upon which the organism relied for its adaptation.”).

decision making. To be sure, various forms of emotionality are more and less desirable, and the “emotion versus reason” frame captures the important point that decision making appears to occur through varying levels of interaction between primary emotions (quicker and more immediate, usually provoked more directly by environmental stimuli) and secondary emotions (from memory, schemas, and deliberation).³⁹⁶ But this only underscores that it is a mistake to label “emotion” the culprit. Rather than denigrate emotion outright, attempts to prescribe behavior should study the role that various types of emotion play in different situations and inquire how to promote some influences and mute others.³⁹⁷ Of course, we need a theory of welfare before we can do this. We should cease insisting that people think and act “reasonably” or “rationally” rather than “emotionally.” Or perhaps the word “reason” will come to signify something more clearly emotional.

b. Process: the primacy of emotion and automaticity. The law also should take emotion’s role in behavior much more seriously, which means treating it as primary rather than secondary (or, worse, as a source of interference) in decisions. Emotion in the form of what is appealing and aversive is at the core of incentives and behavior. This means that regulators seeking to influence behavior and to prevent undesirable influences on people’s behavior should pay far more attention to non-linguistic forms of information, communication, and influence. This includes subtle, situational manipulations of affective cues and emotional communication through direct appeals, images, and even smells and tastes.

Emotional realism requires us to recognize “reason” or “rationality” for what it is—an evolutionary late-comer, flawed, limited, and incapable of directing most day-to-day thought and action. As a result, we should be less sanguine about remedying behavioral problems with information or reasoned persuasion. Additionally, because so much human behavior is nonconscious, automatic, and not readily amenable to inspection, we should reevaluate areas of the law that depend on proving states of mind.

396. See Bechara & Damasio, *supra* note 159, at 340; cf. George Loewenstein & Ted O’Donoghue, *Animal Spirits: Affective and Deliberative Processes in Economic Behavior* 13–21 (May 2005) (unpublished manuscript).

397. For some work in this area, see Blumenthal, *Emotional Paternalism*, *supra* note 297.

c. Ends: welfarism and revealed preferences. Emotional realism recognizes that people's actions do not necessarily demonstrate what increases their well-being, or even what they *think* will do so. The more useful assumption is that actions reveal little more than people's interactions with the environment—responses to current affective incentives, which include both immediate environmental influences and mental representations of past and future events. Welfarists should move away from the circular definitions of welfare and preferences employed by rational choice theory and emotional irrationalism and instead examine the real causes of human happiness. At a minimum, strong evidence suggests that material wealth provides little if any welfare gains to people who already live above some floor of material comfort,³⁹⁸ suggesting that economic efficiency should not be a dominant goal of welfarists and that legal doctrines attuned to efficiency should be reevaluated.

2. *Specific applications*

a. Employment discrimination. The law of race discrimination has already benefitted from an application of affective theory. For example, Linda Hamilton Krieger and Susan Fiske have argued that Title VII analysis should account for nonconscious affective influences.³⁹⁹ They argue that an employment decision is motivated by a protected characteristic merely when “the characteristic served as a stimulus which, interacting with the decision maker's internal biased mental state, led the decision maker to behave toward the person differently than he otherwise would.”⁴⁰⁰ Krieger and Fiske affirm that this process is often nonconscious and automatic, in contrast to the prevailing legal assumption that it must be conscious and deliberate,⁴⁰¹ and they recognize that the operation of such biases is inherently context dependent.⁴⁰² They argue that jurors should determine whether this sort of influence took place and even

398. *See supra* text accompanying notes 16–26.

399. Krieger & Fiske, *supra* note 1, at 1056.

400. *Id.*

401. *Id.* at 1057.

402. *Id.*

argue that such a regime will not alter the types of evidence used in Title VII litigation.⁴⁰³

This work is important, and a very good start, but Krieger and Fiske may be mistaken to conclude that recognizing Title VII violations for instances of nonconscious prejudice will change little about Title VII litigation. To the contrary, the approach might alter Title VII litigation dramatically or even destabilize the regime irreparably. The evidence on nonconscious prejudice suggests that, under a regime that recognizes a violation of Title VII where a decision has been motivated in any part by nonconscious racial discrimination, liability will be found in a far higher percentage of cases, and increasingly so as plaintiffs develop better means of proof.⁴⁰⁴ In short, if nonconscious prejudice is as common as researchers believe, and if plaintiffs learn how to prove its presence in individual cases, then defendants might lose the majority of Title VII cases. It is doubtful that this result will be politically or legally palatable.

There are two potential responses to the Krieger and Fiske research. First, create some doctrinal limit on Title VII liability for nonconscious prejudice in employment. For example, rather than finding liability whenever nonconscious prejudice plays any role in an adverse employment action, one could establish a minimum threshold of required influence. A second and more drastic response would be to conclude that private litigation—or at least the current private litigation regime—is not a good solution to workplace discrimination. A full discussion of these issues is well beyond the scope of this Article. For present purposes, the point is that, as

403. *Id.* at 1059 (“Under the framework we propose, the evidence would remain much the same, but the inferences reasonably drawn from that evidence, and the nature of the ultimate fact the evidence would be offered to prove, would expand to accommodate the insight that disparate treatment can result from the uncorrected influence of implicit stereotypes as well as from their deliberate, fully conscious use.”). Jerry Kang and Mahzarin Banaji have taken a situationist perspective in discussing the question when affirmative action programs should end. Because there is strong evidence that racial bias operates nonconsciously and that people are not aware of its influence and do not report it accurately, they argue that appeals to “colorblindness” are deeply misguided and fixed dates for ending affirmative action, such as Justice O’Connor’s suggestion of twenty-five years, are arbitrary. *See* Kang & Banaji, *supra* note 195, at 1115–17. Instead, “[f]air measures that are race- or gender-conscious will become presumptively unnecessary when the nation’s implicit bias against those social categories goes to zero or its negligible behavioral equivalent.” *Id.* at 1116.

404. Not to mention that a wealth of currently discounted circumstantial evidence will have much greater impact on outcomes.

evidence mounts that most people are unwittingly prejudiced most of the time, a regime that finds liability for such prejudice may be strained deeply, then broken, by intractable problems of evidence and line-drawing.

b. Advertising and consumer protection. Emotional realism also has substantial implications for consumer law. Foremost, it suggests that advertisers will strive to influence people nonconsciously and affectively, seizing upon the mechanisms outlined in Part III above, in what I would term *affectising*. A mere glance at television commercials confirms this.⁴⁰⁵ Policymakers should undertake a serious analysis of the benefits and harms of attempts to influence people emotionally and nonconsciously, for “feelings are the sensors for the match or lack thereof between nature and circumstance.”⁴⁰⁶ Emotional realism also predicts that consumers will be influenced by other forms of persuasion such as statements deemed so outlandish that no “rational” person would believe them, statements made only for entertainment value, and statements of opinion. Contemporary consumer law, with its rationalized focus on false factual claims (“deception”) and unavoidable harm to consumers (“unfairness”), has virtually nothing to say about these forms of communication, even though they are the principal means by which firms attempt to influence consumers.

If one maintains the goal of rationalizing or debiasing consumer decisions, then a potential response to affectising is an *effects* test under which a statement is unfair or deceptive if it makes an effective claim that is not a true statement of fact. By definition, these communications succeed by influencing people in a manner other than by engaging their rational faculties. However, such an approach may be overbroad. Given limited human capacities for information processing and reasoning, it seems likely that non-linguistic and emotional forms of communication may be desirable in some instances. The difficulty, then, will be discerning the valuable from the wasteful and harmful.

405. For excellent work on this point, see Hanson & Kysar, *TBS I*, *supra* note 13; Hanson & Kysar, *TBS II*, *supra* note 13.

406. DAMASIO, DESCARTES' ERROR, *supra* note 149, at xv (“And by nature I mean both the nature we inherited as a pack of genetically engineered adaptations, and the nature we have acquired in individual development, through interactions with our social environment, mindfully and willfully as well as not.”).

Other aspects of consumer law require reexamination as well—for example, laws regarding causation and states of mind. The evidence reviewed in this Article suggests that the causes of consumer choices are often unknown and unknowable, even to consumers themselves.⁴⁰⁷ This suggests that requiring consumers to show reliance on particular representations might be nonsensical and harsh in some instances.

Similarly, regarding sellers' states of mind, firms should be expected to attempt to influence consumers in numerous ways that the firms themselves do not understand, and to succeed in many instances.⁴⁰⁸ This means that many unfair and deceptive practices will not necessarily be *intended*. Moreover, the question whether a deceptive act is committed intentionally should have little bearing on its legality. For these reasons, common-law seller scienter requirements, still present in some consumer protection statutes, also may present a senseless and often insurmountable hurdle for consumers. For these reasons, recent attacks on modern consumer protection statutes that urge stricter common-law standards of reliance and seller intent⁴⁰⁹ may be deeply flawed.

Finally, advertising is becoming increasingly narrowly targeted at particular individuals and situations—acutely tuned to reach just the right person, in just the right way, in just the right context—to maximize a-rational influence on people.⁴¹⁰ These efforts may cross a

407. See *supra* Part III.B. This is a core feature of automaticity research. For a superb overview on how nonconscious processes guide behavior outside our awareness, see TIMOTHY WILSON, STRANGERS TO OURSELVES: DISCOVERING THE ADAPTIVE UNCONSCIOUS (2002).

408. As Hanson has explained in several different articles, firms are in stiff competition to influence consumers, experimenting constantly with different approaches, and can be expected to succeed in many instances even without understanding what they are doing. See Hanson & Kysar, *TBS I*, *supra* note 13; Hanson & Kysar, *TBS II*, *supra* note 13; Hanson & Yosifon, *Situation*, *supra* note 1.

409. See, e.g., MICHAEL S. GRIEVE, HARM-LESS LAWSUITS? 4–9 (2006); Victor E. Schwartz & Cary Silverman, *Common Sense Construction of Consumer Protection Acts*, 54 U. KAN. L. REV. 1 (2006).

410. See, e.g., Michele Gershberg, *Yahoo Beefs Up Target Advertising Tools*, REUTERS, July 2, 2007, <http://www.reuters.com/article/industryNews/idUSSP25867220070702> (last visited Nov. 20, 2008) (describing Yahoo's plans to use behavioral targeting to fine-tune advertisements to particular users); Alana Semuels, *Yahoo Lets Consumers Opt Out of Targeted Advertising. Everyone Rejoice?*, BLOG OF THE L.A. TIMES, Aug. 8 2008, <http://latimesblogs.latimes.com/technology/2008/08/yahoo-lets-cons.html> (last visited Nov. 20, 2008) (describing Yahoo's decision to let users opt out of targeted advertising, a response to scrutiny of targeted advertising by the House Energy and Commerce Committee of the United States House of Representatives).

threshold that regulators and judges should recognize as “unfair.” A difficult inquiry, ripe for examination, is how the concept of “unfairness” might extend, in a principled manner, to embrace some forms of intense targeting of individual consumers and consumer subpopulations.

In sum, emotional realism counsels a broad reexamination of advertising law, including legal treatment of marketing content, delivery methods, and burdens of proof and defenses in litigation.⁴¹¹

c. Other substantive applications. A realistic view of emotion should have numerous other applications, particularly for areas of law concerned with intent, decision making, or non-linguistic communication. For example, contract law perhaps should acknowledge more instances of emotional weakness sufficient to undo contracts, and perhaps judges should be especially sensitive to the potential for harm and manipulation by false friends and romantic partners.⁴¹² More generally, tort and contract law perhaps should acknowledge that different emotional relationships between people might give rise to different legal rights and obligations.⁴¹³ In the First Amendment context, evidence of the importance of non-linguistic communication may counsel for better protection of expressive conduct.

In criminal law, emotional realism’s insight into incentives might alter the punishments we enact. For example, we punish “heat of passion” crimes less because we find them less morally repugnant. Emotional realism suggests that this retributive approach may defeat our deterrence objectives. If the key to deterring a crime is to create negative consequences so emotionally salient that they outweigh the affirmative motivation to commit an unlawful act, then perhaps heat of passion crimes require *stiffer* consequences (or just very different ones). The stronger one’s emotional motivation to commit a crime,

411. Little work has been done in this area. In the products liability context, Hanson and Kysar have argued that problems of market manipulation bolster the case for enterprise liability. See Hanson & Kysar, *TBS I*, *supra* note 13; Hanson & Kysar, *TBS II*, *supra* note 13. David Hoffman has argued for a rebuttable presumption that puffery is unlawful. See David A. Hoffman, *The Best Puffery Article Ever* (June 1, 2006) (unpublished manuscript, on file with author).

412. See Blumenthal, *Emotional Paternalism*, *supra* note 297, at 66; Ethan J. Leib, *Friendship & the Law*, 54 *UCLA L. REV.* 631, 685–94 (2007).

413. See, e.g., Leib, *supra* note 412, at 685–94 (analyzing potential unique rights and obligations in the context of friendship). Another area ripe for inquiry is the law of transactions between emotional humans and organizations that do not experience emotion.

however momentary, the stronger the emotional deterrent needed to stop it.

d. Something missing in law school admissions. Finally, setting aside substantive law, emotional realism also suggests that there may be something important missing in law school admissions. If emotion is critical to reason—if all judgments are based upon emotions and emotional values—then law schools may be remiss to rely heavily on the Law School Admission Test, which evaluates reading comprehension and logical reasoning, and to ignore measures of emotional or social intelligence.⁴¹⁴ This proposition may sound radical. But given the importance of emotion in decisions—particularly in *social* decisions, the core province of law—we may be deeply mistaken to train new lawyers, judges, and policymakers who excel in traditional measures of intellect without ensuring that they also have good emotional faculties.

3. *Emotional realism in risk regulation*

Finally, having discussed the shortcomings of emotional irrationalism and emotional rationalism in the risk regulation context, it is necessary to explain why emotional realism might provide a better approach. The starting point is that we have no coherent, settled definition of welfare on which to base policy. Notions of the good appear to be irreducibly a-rational and impervious to scientific resolution; therefore, normative economics is pseudoscience, and policy making tailored to its vision of welfare is the pursuit of particular values behind a mask of neutrality.⁴¹⁵ Neither emotional irrationalism nor emotional rationalism answers this problem.

Emotional realism suggests a potentially fruitful line of inquiry by refocusing, as this Article has focused, on processes rather than objects. I mean this in two ways. First welfare, like the emotions that it represents, is probably better viewed as a process than an object. We should conceptualize well-being as the process of being well, not as a set of objects amenable to enumeration and accumulation. To be sure, empirical evidence provides a basis for object-like components

414. See generally DANIEL GOLEMAN, EMOTIONAL INTELLIGENCE: WHY IT CAN MATTER MORE THAN IQ (1997); GOLEMAN, SOCIAL INTELLIGENCE, *supra* note 56.

415. For similar views, see ACKERMAN & HEINZERLING, *supra* note 316, at 8–12; Kahan et al., *supra* note 315.

of welfare, such as minimum standards of material comfort and equality, below which people are demonstrably unhappy.⁴¹⁶ But aside from baselines of wealth, equality, and autonomy, the evidence suggests that we experience well-being for the most part through processes such as close relationships and activities that engage our skills and interests constructively, not through the acquisition and retention of objects and statuses.⁴¹⁷ This may mean that some processes (such as close relationships and engaging activities) are so generally good for well-being that regulators should promote them as policy objects. Or it may mean simply that policy makers should foster circumstances under which people can engage in flourishing behavior on their own. Even more simply, policy makers might start by reducing impediments to such activity.⁴¹⁸

Second, if we cannot agree on the objects of policy—for example, the amount we are willing to pay to save a life—then we should work to find good processes for resolving them. Regarding the process of fashioning risk regulation policy, emotional realism suggests that the insulated-experts model is deeply mistaken. Regulators should attempt to incorporate public emotion (albeit with moderation) rather than insulate policy from it. Because we cannot define welfare without resorting to emotional value judgments, policy makers have no purely rational metrics to follow, and they need emotional guidance, whether their own or the

416. *See supra* text accompanying notes 16–26. This suggests that a policy of maximizing the size of the economy and the efficiency of legal rules at the expense of ensuring minimum living standards and better distribution of benefits is wasteful and misguided from a welfarist perspective.

417. *See supra* text accompanying note 27 (discussing close well-being and relationships); MIHALY CSIKSZENTMIHALYI, *FLOW: THE PSYCHOLOGY OF OPTIMAL EXPERIENCE* (1990); DAMASIO, SPINOZA, *supra* note 106, at 137 (“Joyous states signify optimal physiological coordination and smooth running of the operations of life.”).

418. For example, policy makers could work to reduce economic stress and lack of autonomy in people’s lives even if those changes appear to come at the expense of economic models of efficiency. And we should reexamine government interference with welfare-enhancing processes—for example, marriage. Given strong evidence that marriage is one of the clearest sources of positive well-being, laws banning marriage between consenting adults, such as homosexual marriage bans, may be exceedingly cruel and costly in terms of well-being, preventing people from engaging in an activity more likely than any other to contribute to their happiness. (There is still a lurking empirical question whether close relationships between unmarried people yield similar happiness.) If the Constitution provides any substantive due process protection, it should provide a right to engage in the personal relationship more likely than any other to yield well-being, and states ought to meet an extremely high burden to interfere with it.

public's. Insulated experts may pursue policies that do not reflect public values, or even policies that harm people, and their sterile, technical analyses may miss problems that the public's affective processes can perceive. Moreover, as cultural cognition theorists point out, it is difficult to argue in a liberal state that the public's value judgments are not entitled to respect.⁴¹⁹ At the same time, it is not clear that the cultural-cognition approach of finding policies that appeal to people of differing cultural worldviews will yield good policy, rather than merely muting political conflict. Also, the approach retains a highly paternalist element because someone still must choose policies and devise the means of selling them to the public. Finally, the greatest risk in paternalist approaches is their potential to undermine even the baselines of well-being—minimum standards of material wealth, equality, and autonomy under which people can flourish. History instructs us amply on the dangers of paternalism, particularly when it is not grounded in coherent theory and policy makers lack clear boundaries.

For all of these reasons, risk regulation should reflect public emotion at least as much as it should be protected from it. At the same time, risk regulation should not be derived *directly* from public input (for example through direct democracy). This is for two reasons. First, although emotions underlie all policy judgments, emotional realism recognizes that people's emotions are not always good for them and may be spectacularly wrong in some instances, particularly, as Sunstein argues, when they are products of high-profile scares.⁴²⁰ Therefore, we would be mistaken to plug public emotions directly into policy without some kind of moderator or gatekeeper.⁴²¹ Second, individuals can make only a limited number of reasoned decisions, and many decisions, or merely having too many decisions, can burden us and diminish our well-being. We lack the time or resources to reason carefully about many aspects of our lives and therefore properly rely on others to help us.

419. See Kahan et al., *supra* note 315, at 1105. Also, the failure to address certain types of emotionality in policy can cause unhappiness. That is, even if the public's concern for something appears misguided, the public cares nonetheless and might be harmed by regulatory inattention to the perceived problem. See ACKERMAN & HEINZERLING, *supra* note 316, at 130–36. Sunstein appears to agree with this point. See SUNSTEIN, FEAR, *supra* note 7, at 127.

420. SUNSTEIN, FEAR, *supra* note 7, at 89–106.

421. Of course, as discussed earlier in this section, we should seek a means of distinguishing the good from the bad better than the emotional-irrationalist approach of guesswork and intuition.

Our best hope in risk regulation, then, is to place policy in the hands of experts, but also to ensure that they share public values. In short, we need well-functioning *republicanism*. This proposition is strikingly absent from the risk regulation debate, given its prospects for moderating between expertise and public values. Republicanism is also sorely lacking in the contemporary administrative state, which is composed of officials appointed by the President (who is never elected or defeated on the basis of an administrative appointment) and characterized by regulations and procedures that are opaque and inaccessible to the general public.

A discussion of how best to foster republicanism in risk regulation is obviously beyond the scope of this Article, but several possibilities are worth exploring. One approach would be to employ periodic citizen panels with diverse memberships to develop expertise and recommend policies. Another would be to rely as we currently do on professional experts, but also to make them more accountable to the public, perhaps through direct elections. Others possibilities are to enhance citizen participation in special commission recommendations or in the agency rulemaking process. Whatever the means, the goal is simple: we want other people to make important decisions for us, and we want those people to share our values. It is unlikely that regulators will share our values at all times, given the differences among us. That is why they must be accountable to us, ensuring that policy judgments are accessible and susceptible to modification.

CONCLUSION

This Article has attempted to say much, but it can be reduced to a single point—law and legal theory treat emotion primarily as an object of reasoned decisions and policy making and as a source of interference in decisions, but empirical evidence suggests that emotion is a behavioral process that is critical to decisions. This shift in viewpoint has widespread implications for law, legal theory, and policy. As a descriptive matter, it suggests that we should reevaluate legal doctrines that rely on the assumption that humans are mostly emotionless actors and reexamine areas of law that concern consent, states of mind, and the causes of behavior. As a normative matter, emotional realism suggests that we have no empirical or even internally consistent definition of welfare on which to base policy.

Welfarists should seek a new definition, and they are more likely to find it in processes than in objects. There is much work to be done.