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Torn Between Two Selves: Should Law Care More About Experiencing Selves or Remembering Selves?

*Peter H. Huang**

ABSTRACT

Based upon psychological research and neuroscience studies about subjective well-being, 2002 Nobel Laureate in Economics Daniel Kahneman poses a riddle about which of these two selves should count: experiencing selves or remembering selves. Our remembered emotions (memories) are usually rosier than our experienced emotions, and people are motivated by their predicted emotions, which tend to coincide with their emotional memories. This Article advocates that law should care more about experiencing selves than remembering selves if and when experiences result in chronic health or stress consequences that either (1) societies care about more than people do (because of externalities, public bads, or public goods); or (2) people also care about, but are unaware of, do not remember, or are unable to act upon (due to self-control problems). This article analyzes examples of chronic health or stress effects from such experiences as dense and long commutes, unhealthy eating, regular physical exercise, sedentary behavior, and financial/retirement planning.

There is a video I found from back when I was three
You set up a paint set in the kitchen
And you're talking to me

It's the age of princesses and pirate ships
And the seven dwarfs
Daddy's smart
And you're the prettiest lady in the whole wide world

Now I know why all the trees change in the fall
I know you were on my side
Even when I was wrong
And I love you for giving me your eyes
Staying back and watching me shine

And I didn't know if you knew
So I'm taking this chance to say
That I had the best day with you today.¹

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1. TAYLOR SWIFT, *The Best Days, on FEARLESS* (Big Machine Records 2008).

INTRODUCTION

Father Guido Sarducci, a famous fictional character created and played by *Saturday Night Live* original cast member comedian Don Novello during the 1970s and 1980s, proposes in a very entertaining monologue to start a new university that would teach in only five minutes the information that average students remember five years after leaving college.² For example, he jokes that his Five Minute University Spanish teaches only “¿Cómo está usted?” which means “How are you?” and “muy bien” which means “very well,” because that is pretty much all that most students remember five years after taking four semesters of college Spanish.³ He concludes by saying: “I’m not sure, but I’m pretty sure, right next door to the Five Minute University, I might open up a little law school. You got another minute?”⁴

His central point is that most college students remember only very little of the vast amount of material they study in four years of college. Of course, this fundamental insight applies not only to college students, but also to everyone more generally. None of us remembers every single moment in our lives, and of those moments that we do remember, not all of them are remembered with equal clarity or emphasis. Naturally, our memories are fallible and imperfect. But such an observation compares human memories to records of a computer or some other infallible and perfect recording device left operating all the time. Such a comparison misconstrues human memory as having a goal of perfect recall. Psychologist William James pointed out, “[s]election is the very keel on which our mental ship is built. And in this case of memory, its utility is obvious. If we remembered everything, we should on most occasions be as ill off as if we remembered nothing.”⁵ Instead, we remember to help us derive meaning from and make sense of all those moments in our lives. People only remember that which is personally meaningful,⁶ and what is meaningful to people often changes during their lifetimes in light of subsequent events.

An influential expert on human memory and law, psychologist Elizabeth Loftus points out that people’s memories are not only constructed,

2. See GILDA LIVE (Warner Bros. 1980), transcript available at <http://www.templaruniversity.com/guido.html> (last visited Oct. 10, 2014).

3. *Id.*

4. *Id.*

5. WILLIAM JAMES, *THE PRINCIPLES OF PSYCHOLOGY* 680 (1890).

6. See Robert I. Sutton, *Feelings About a Disneyland Visit: Photography and the Reconstruction of Bygone Emotions*, 1 J. MGMT INQUIRY 278 (1992) (suggesting that a key component of people’s memories of events comes from photographs taken of happy moments).

rather than played back like a video recording,⁷ but also can be influenced by suggestive language and images.⁸ Elizabeth Loftus memorably states:

Memory. It's a paradox. Memory is the bedrock of who we are. Without memory, life would not have the sense of continuity that it does. It would consist only of momentary experiences that don't relate to each other. Without memory we could not remember what we want to say. Nor would we have the sense of continuity to know who we are.⁹

Psychologist, subjective well-being research pioneer, and 2002 Nobel Laureate in Economics,¹⁰ Daniel Kahneman, poses a riddle which of these two selves should count: experiencing selves or remembering selves.¹¹ Noted philosopher of emotions Ronald de Sousa states:

[W]hat are we to say about the prospect that present experience will get reassessed by future judgment? Conversely, why should I trust a present judgment about the past that doesn't match the assessment I made at the time? Which matters more? Is it what I experience right now, or is it what I will experience in retrospect, as I judge this moment in the calm contemplation of what my life was like? I have no answer, nor any principle for generating one. That lacuna, indeed, can be taken as the main message of this book.¹²

This article proposes that the law should care more about people's experiences than memories in at least one pair of general circumstances: first, if society cares more about certain aspects or consequences of experiences than individuals do; and second, if people do not remember or are unaware of, but care about, negative aspects or consequences of experiences.

7. See generally ELIZABETH LOFTUS, *MEMORY: SURPRISING NEW INSIGHTS INTO HOW WE REMEMBER AND WHY WE FORGET* (1980).
8. See Elizabeth F. Loftus, *Planting Misinformation in the Human Mind: A 30-Year Investigation of the Malleability of Memory*, 12 *LEARNING & MEMORY* 361, 363 (2005).
9. Elizabeth F. Loftus, *Crimes of Memory: False Memories and Societal Justice*, in *PSYCHOLOGY AND THE REAL WORLD* 83, 83 (Morton Ann Gernsbacher et al. eds., 2011).
10. *Daniel Kahneman—Facts*, NOBELPRIZE.ORG, http://nobelprize.org/nobel_prizes/economics/laureates/2002/kahneman.html (last visited Nov. 15, 2014) [hereinafter *Kahneman on NOBEL PRIZE*].
11. Daniel Kahneman, *The Riddle of Experience vs. Memory*, TED (Feb. 10, 2010), available at http://www.ted.com/talks/daniel_kahneman_the_riddle_of_experience_vs_memory; DANIEL KAHNEMAN, *THINKING, FAST AND SLOW* 377–410, 381 (2011) [hereinafter *Kahneman, Experience vs. Memory*].
12. RONALD DE SOUSA, *EMOTIONAL TRUTH* 244 (2011).

People's experiences include, but are not limited to, experienced affect. There are multiple dimensions of experiences including experienced affect, biological consequences or health measures of experiences, and spillover effects of individual experiences upon others.¹³ This multiplicity of aspects of experiences naturally suggests a decomposition or taxonomy of consequences of experiences into at least experienced affect, experienced biological, health, or stress consequences, and remembered affect. In fact,

doctors and physicians are learning that stress is more than an emotional problem, deeper than a fleeting mental encumbrance. Our brains constantly rewire themselves throughout our lives, and are strongly driven by experiences, both positive and negative. And it seems that in certain situations, stress is an antagonist that can indeed leave an indelible mark on our brains.¹⁴

Experiences can produce negative experienced affect and negative biological, health, or stress consequences, but nonetheless be generally forgotten or produce only mildly negative or even neutral remembered affect. Examples of such experiences are long and dense urban commutes. Experiences can also produce negative experienced affect and negative biological, health, or stress consequences but produce dampened remembered negative affect. Examples of such experiences possibly include long and dense commutes. Experiences can even produce positive experienced affect but negative biological or health consequences and positive remembered affect. Examples of such experiences possibly include unhealthy (over)eating and certain types of addictive or obsessive behavior.

People choose experiences based upon their predicted affect, which often coincides with remembered affect rather than experienced affect. The fact that the valence of remembered affect can differ from that of not only experienced affect, but also biological, health, or stress consequences, implies that people may engage in activities that have adverse effects on their health, such as undergoing long and dense commutes and eating unhealthily.

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13. See David G. Blanchflower & Andrew J. Oswald, *International Happiness* (Nat'l Bureau of Econ. Research, Working Paper No. 16668, 2011), available at <http://www.nber.org/papers/w16668> (conjecturing that there is likely to be a slow convergence between the growing social science research literature about happiness, mental well-being, and subjective well-being with a related biological, epidemiological, and medical research literature about biomarkers, health, and physical well-being).
 14. Brian Mossop, *Neurostress: How Stress May Fuel Neurodegenerative Diseases*, SCI. AM. (Feb. 2, 2011), <http://www.scientificamerican.com/article.cfm?id=neurostress-how-stress-ma>; see also Debra S. Austin, *Killing Them Softly: Neuroscience Reveals How Brain Cells Die from Law School Stress and How Neural Self-Hacking Can Optimize Cognitive Performance*, 59 LOY. L. REV. 791, 816–22 (2013) (describing the relationship between the brain and the body in response to stress).

Individuals may indeed care about suffering from adverse biological or negative health consequences of certain experiences, but are unaware of those consequences as they happen, underestimate cumulative and/or probabilistic effects, or not care about negative externalities or public bad aspects of their experiences. In contrast, societies may care about individual health consequences or social effects more than individuals do. Possible legal interventions include emphasizing public attention on adverse biological or negative health consequences of experiences, such as being sedentary and repeatedly undergoing dense and long commutes. Or conversely, legal interventions could also include focusing public attention on positive biological or health consequences from experiences such as healthy eating and regular physical exercise. This refocusing of attention is akin to directing an anxious airline passenger's awareness to a still cup of water to see lack of turbulence on a plane.

This article proceeds as follows. Part I analyzes happiness research¹⁵ and neuroscience studies about experienced affect versus remembered (and predicted) affect to conclude that most people's experienced affect systematically differs from remembered affect (which tends to coincide with predicted affect). Part II advocates that law should care more about experiencing selves than remembering selves if and when experiences are repeated with adverse cumulative, delayed, and long-term objective health or stress consequences, as is true of long dense commutes. Part II also briefly surveys other contexts and situations in which the law should care more about health and stress consequences of lived experiences than recalled memories, including over-eating or unhealthy eating, physical exercise, and retirement/financial planning.

II. EXPERIENCING SELVES VERSUS REMEMBERING SELVES

"Forget about it. You'll have a thousand pasts and no future."¹⁶

A very brief video with only music and written text very effectively and movingly portrays how experiences and memories of happiness often diverge, and how alternative temporal perspectives can be crucial to achieving happiness.¹⁷ Related themes often play important roles in movies, television programs, and literature. For example, how our past and present selves are related, how memories filter our past, and how persistent memories can dam-

15. See generally Peter H. Huang, *Happiness Studies and Legal Policy*, 6 ANN. REV. L. & SOC. SCI. 405 (2010) (analyzing legal policy implications of happiness research); see also Peter H. Huang, *Happiness in Business or Law*, 12 TRANSACTIONS: TENN. J. BUS. L. 153 (2011) (providing a brief introduction to recent happiness research and its applications to business or law).

16. EL SECRETO DE SUS OJOS (THE SECRET IN THEIR EYES) (Sony Pictures Classics 2009).

17. Gretchen Rubin, *The Years Are Short*, <http://www.theyearsareshort.com/> (last visited Nov. 15, 2014).

age efforts to live presently are central and recurring themes in the film that received the 2010 Best Foreign Language Film Oscar,¹⁸ *El Secreto de Sus Ojos* (*The Secret in Their Eyes*).¹⁹ In another movie, *The Best of Times*,²⁰ comedian Robin Williams plays a banker who is obsessed with the one moment in his life that he is most ashamed of, namely when he dropped a perfectly thrown football pass in the final seconds of a high school game thirteen years earlier. In another film entitled *Old School*,²¹ three thirty-something-year-old men seek to recapture the outrageous, irrepressible fun they had at college. Reality television programs do not show raw, unedited 24/7 footage of contestants' actual experiences, but instead present edited, selected episodes that involve peak emotions and/or meaningful, memorable moments of contestants' experienced lives. Similarly, fictional television shows present selected moments of characters' lives in meaningful story arcs. Finally, fictional and non-fictional works of literature do not recount every moment of their characters' experiences, but instead only describe particular moments that hold meaning.

Before analyzing research about experiences versus memories from happiness studies and neuroscience, it helps to emphasize that even though sometimes objective outcomes and subjective experiences may diverge in response to various events and circumstances in people's lives, very often objective outcomes and subjective experiences also coincide. Not surprisingly, economics and law traditionally focus on objective outcomes that are measurable, observable, and verifiable rather than subjective experiences that some regard as immeasurable, unobservable, and unverifiable. A commonly held view is that subjective experience is a first-person phenomenon, so that other people have to filter and interpret both contemporaneous and remembered self-reports about subjective experience.

But, an extensive recent set of literature in such fields as economics, epidemiology, neuroscience, psychology, and sociology contend that subjective experiences can be reliably measured, observed, and verified. Undoubtedly, part of the skepticism regarding experiences is due to an uneasy relationship with, and skepticism toward, a core aspect of subjective experiences—namely emotions—by many attorneys,²² legal educators,²³ and legal

18. *Nominees & Winners for the 82nd Academy Awards*, OSCARS, http://awards.database.oscars.org/ampas_awards/DisplayMain.jsp?curTime=1413038804155 (last visited Oct. 10, 2014).

19. *EL SECRETO DE SUS OJOS*, *supra* note 16.

20. *THE BEST OF TIMES* (Universal Studios 1986).

21. *OLD SCHOOL* (DreamWorks SKG 2003).

22. See generally Helaine & Dwight Golann, *Why Is It Hard for Lawyers to Deal with Emotional Issues? A Dialogue Between a Lawyer-Mediator and a Therapist*, 9 No. 2 DISP. RESOL. MAG. 26, 26–29 (2003) (condensing discussions between a husband and wife concerning lawyers' uneasiness in dealing with emotions).

scholars.²⁴ Two traditional arguments to justify not incorporating emotions into legal analysis, practice, and scholarship are that emotions can distort judgments²⁵ and could be feigned.²⁶ Of course much of life can distort judgments; not only emotions, but also beliefs, thoughts, and testimony could be feigned. To be sure, certain emotions are already accepted in some particular areas of law, such as criminal law²⁷ (compassion, hate, mercy, passion, revenge, sympathy, vengeance), family law²⁸ (envy, love, hate, jealousy), and negotiations.²⁹ But, a more general acceptance of how central emotions—in addition to such non-emotional aspects of experiences as meaning³⁰ and self-

23. See, e.g., Grant H. Morris, *Teaching with Emotion: Enriching the Educational Experience of First-Year Law Students*, 47 SAN DIEGO L. REV. 465, 467–519 (2010) (criticizing legal education's neglect of emotions and providing examples of including emotional components to a torts class); Joshua D. Rosenberg, *Interpersonal Dynamics: Helping Lawyers Learn the Skills, and the Importance, of Human Relationships in the Practice of Law*, 58 U. MIAMI L. REV. 1225, 1229–35, 1258–61, 1277 (2004) (criticizing the overemphasis of legal education on logic and reason in addition to explaining the importance of emotions to legal practice and therefore legal education).
24. Kathryn Abrams & Hila Keren, *Who's Afraid of Law and the Emotions?*, 94 MINN. L. REV. 1997, 2013–33 (2010) (examining ambivalent responses to scholarship about emotions in law).
25. Owen M. Fiss, *Reason in All Its Splendor*, 56 BROOK. L. REV. 789, 800 (1990) (arguing indeterminacy of emotional judging due to multiplicity of emotions and objects upon which emotions focus); Richard A. Posner, *Emotion Versus Emotionalism in Law*, in THE PASSIONS OF LAW 309, 309, 311, 327 (Susan A. Bandes ed., 1999) (expressing concern over distorting effects of emotionalism and emotions).
26. Carol Sanger, *The Role and Reality of Emotions in Law*, 8 WM. & MARY J. WOMEN & L. 107, 111 (2001) (expressing concern that instructing judges and jurors to pay attention to emotions could induce defendants to strategically display counterfeit remorse during sentencing process); Austin Sarat, *Remorse, Responsibility, and Criminal Punishment: An Analysis of Popular Culture*, in THE PASSIONS OF LAW 168, 168, 169 (Susan A. Bandes ed., 1999) (expressing skepticism about abilities of legal decision makers to differentiate between feigned and genuine remorse).
27. See, e.g., Dan M. Kahan & Martha C. Nussbaum, *Two Conceptions of Emotion in Criminal Law*, 96 COLUM. L. REV. 269 (1996).
28. See, e.g., Clare Huntington, *Happy Families? Translating Positive Psychology into Family Law*, 16 VA. J. SOC. POL'Y & L. 385 (2009).
29. See, e.g., Clark Freshman et al., *The Lawyer-Negotiator as Mood Scientist: What We Know and Don't Know About How Mood Relates to Successful Negotiation*, 2002 J. DISP. RESOL. 1 (2002).
30. But see Carroll E. Izard, *Don't Pursue Happiness—Find and Follow What Interests You*, 25 EMOTION RESEARCHER 5, 5–6 (discussing importance of meaning to happiness).

identity—are to people’s lives is bound to have profound implications for law,³¹ just as it does in the private sector for product design³² and building architecture.³³ Marketing professor Peter Boatwright and professor of mechanical engineering, design, and computer science Jonathan Cagan offer numerous case studies and examples of products and services that captivate people because they provide authentic, emotionally fulfilling, and memorable experiences,³⁴ such as Amazon.com,³⁵ BMW sports cars,³⁶ Facebook,³⁷ Google and Google Maps,³⁸ Harley-Davidson motorcycles,³⁹ iPhones,⁴⁰ Nordstrom’s customer service,⁴¹ Webkinz stuffed animals,⁴² and YouTube videos.⁴³ Boatwright and Cagan utilize industry-based research and empirical data to demonstrate that emotionally rich product experiences (and memories) are correlated with greater word-of-mouth buzz,⁴⁴ increased brand loyalty,⁴⁵ more profitability,⁴⁶ and higher stock prices.⁴⁷

31. See, e.g., Hila Keren, *Considering Affective Consideration*, 40 GOLDEN GATE U. L. REV. 165 (2010) (analyzing emotions playing leading roles in gift promising, namely empathy and gratitude, to challenge reflexive unenforceability of gratuitous promises under traditional contract law).

32. See generally DONALD A. NORMAN, *EMOTIONAL DESIGN: WHY WE LOVE (OR HATE) EVERYDAY THINGS* (2005).

33. *Id.* at 109.

34. See generally PETER BOATWRIGHT & JONATHAN CAGAN, *BUILT TO LOVE: CREATING PRODUCTS THAT CAPTIVATE CONSUMERS* (2010); see also *BUILT TO LOVE*, <http://www.builttolove.com/> (accompanying website) (last visited Nov. 15, 2014).

35. BOATWRIGHT & CAGAN, *supra* note 34, at 17.

36. *Id.* at 18, 45, 77.

37. *Id.* at 17.

38. *Id.*

39. *Id.* at 18, 100–04.

40. *Id.* at 13, 22.

41. BOATWRIGHT & CAGAN, *supra* note 34, at 72–73.

42. *Id.* at 15–17; see also WEBKINZ, <http://www.webkinz.com> (last visited Nov. 15, 2014).

43. BOATWRIGHT & CAGAN, *supra* note 34, at 17.

44. *Id.* at 19–20.

45. *Id.* at 21–22, 61.

46. *Id.* at 25–32.

47. *Id.* at 33–42.

A. Objective Outcomes Often Track Subjective Experiences

Law professor Adam Kolber emphasizes how emotions, feelings, and other subjective experiences are fundamentally crucial to law, despite their being indirectly observable and hard to verify.⁴⁸ He believes that law downplays or ignores the importance of subjective experiences because subjective experiences are not directly observable.⁴⁹ A central point of this article is that objective outcomes are often correlated with subjective experiences. This is true in the case of directly-observed social behaviors, acquaintance ratings, clinician judgments, self-reported eudaimonic or psychological well-being (focusing on positive psychological functioning and human development), and self-reported hedonic or subjective well-being (focusing on happiness, presence of positive affect, life satisfaction, and low negative affect).⁵⁰ Philosopher Laura Sizer proposes that an affect theory of happiness can reconcile both objective and subjective aspects of happiness.⁵¹ A state-by-state analysis of the United States indicates a correlation between such objective outcomes as education and wealth and subjective experiences measured by self-reported subjective well-being.⁵² Economists Andrew Oswald and Stephen Wu demonstrate that for all fifty American states and the District of Columbia, estimating quality of life based upon a number of quantifiable objective outcomes matches closely with average self-reported happiness measures of subjective experiences.⁵³ Self-reported measures of subjective life satisfaction from longitudinal panel survey data in Hungary and Russia robustly predict a set of objective outcomes about people's well-being, namely observed household expenditures on various categories of consumption.⁵⁴ Length of daylight duration from dawn to dusk, which correlates with

48. See generally Adam J. Kolber, *The Experiential Future of the Law*, 60 EMORY L.J. 585 (2011).

49. See *id.*

50. Christopher S. Nave et al., *Beyond Self-Report in the Study of Hedonic and Eudaimonic Well-Being: Correlations with Acquaintance Reports, Clinician Judgments and Directly Observed Social Behavior*, 42 J. RES. PERSONALITY 643, 645–57 (2008) (presenting details of these correlations); see also John F. Tomer, *Enduring Happiness: Integrating the Hedonic and Eudaimonic Approaches*, 40 J. SOCIO-ECON. 530 (2011).

51. See generally Laura Sizer, *Good and Good for You: An Affect Theory of Happiness*, 80 PHIL. & PHENOMENOLOGICAL RES. 133, 133–59 (2010).

52. Peter J. Rentfrow et al., *Happy States of America: A State-Level Analysis of Psychological, Economic, and Social Well-Being*, 43 J. RES. PERSONALITY 1073 (2009).

53. See Andrew J. Oswald & Stephen Wu, *Objective Confirmation of Subjective Measures of Human Well-Being: Evidence from the U.S.A.*, 327 SCI. 576 (2010).

54. Ricardo Perez-Truglia, *A Samuelsonian Validation Test for Happiness Data* (Aug. 19, 2010) (unpublished manuscript), available at <http://papers.ssrn.com/>

upbeat moods, on dates auctions take place has statistically and economically significant positive impacts upon auction selling prices in a sample that includes art prices of auctions conducted from 1786 to 1909 in England.⁵⁵ Similarly, in several field and laboratory experiments, as exposure to sunlight increased, negative affect decreased and consumers' spending increased.⁵⁶

Some medical objective outcomes of well-being appear to closely track subjective measures of experienced well-being. For example, measures of heart rates appear to have the potential to be proxies for mental strain.⁵⁷ People who self-report more happiness also systematically report lower hypertension levels, suggesting that high blood pressure readings are potential signs of reduced well-being.⁵⁸ Individuals who report positive affect have less cortisol output, lower neuroendocrine, inflammatory, and cardiovascular activity, and reduced inflammatory markers, such as C-reactive protein and interleukin-6.⁵⁹

Sometimes objective outcomes of well-being and subjective measures of experienced well-being can diverge. For example, negotiators often face and have to make trade-offs between objective-economic or subjective-social-psychological outcomes.⁶⁰ Another example is marketing Professor Jonathan Levav's extensive analysis of medical and psychological research.⁶¹ It demonstrates that objective outcomes of well-being, such as measures of physical and mental health, are highly correlated with life circumstances and

sol3/papers.cfm?abstract_id=1658747 (last visited Nov. 15, 2014) (providing quantitative test results that support reported life satisfaction data being a valid measure of experienced utility).

55. Doron Kliger et al., *Auction Prices and the Weather: New Evidence from Old Masters* (Aug. 26, 2010) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1666550 (last visited Oct. 10, 2014).
56. Kyle B. Murray et al., *The Effect of Weather on Consumer Spending*, 17 J. RETAILING & CONSUMER SERVICES 512 (2010).
57. David G. Blanchflower et al., *Biomarkers, Well-Being, and Income*, Presentation at 6th IZA Prize Conference Frontiers in Labor Economics: The Economics of Well-Being and Happiness (Oct. 24, 2009).
58. David G. Blanchflower & Andrew J. Oswald, *Hypertension and Happiness Across Nations*, 27 J. HEALTH ECON. 218 (2008).
59. Andrew Steptoe et al., *Positive Affect and Psychobiological Processes Relevant to Health*, 77 J. PERSONALITY 1747, 1747 (2009).
60. See, e.g., Jared R. Curhan & Ashley D. Brown, *Parallel and Divergent Predictors of Objective and Subjective Value in Negotiation*, in OXFORD HANDBOOK OF POSITIVE ORGANIZATIONAL SCHOLARSHIP 579 (Kim S. Cameron & Gretchen M. Spreitzer eds., 2011).
61. See generally Jonathan Levav, *The Mind and the Body: Subjective Well-Being in an Objective World*, in DO EMOTIONS HURT OR HELP DECISION MAKING? 315, 316–24 (Kathleen D. Vohs, Roy Baumesiter, George Loewenstein eds., 2007).

events.⁶² However, his analysis also shows that people's self-reports of well-being, reflecting subjective experiences, often exhibit little or no correlation with objective circumstances.⁶³ Levav suggests that this divergence is due to differences in processing times from a dual-level processing of events and circumstances.⁶⁴ First, there is a cognitive and conscious level that judgments of subjective well-being capture.⁶⁵ And second, there is a biological and sub-conscious level that medical objective outcomes capture.⁶⁶ In other words, any event or circumstance in a person's life can leave multiple "memory traces."⁶⁷ These include "bodily" memories in terms of bodily sensitizations or vulnerabilities and cognitive memories that people tap into upon reporting their subjective well-being judgments.⁶⁸ Levav proposes alternative psychological explanations.⁶⁹ One, memory decay, explains why subjective well-being measures fail to capture how some life events alter people's unconscious mental structures.⁷⁰ Another explanation is the idea of "assumptive world schemas" that govern how incoming information is assimilated mentally.⁷¹

Economist Carol Graham has termed one concern with experienced subjective well-being captured by self-reports of happiness as a "paradox of happy peasants and miserable millionaires."⁷² Graham notes that optimism among poor individuals can be a tool for their survival.⁷³ She further ob-

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62. See, e.g., Janice K. Kiecolt-Glaser et al., *Marital Stress: Immunologic, Neuroendocrine, and Autonomic Correlates*, 840 ANNALS N.Y. ACAD. SCI. 656 (1998) (reporting in a study of 90 newlywed and 31 older couples that negative or hostile behaviors during abrasive marital conflict is associated with higher levels of epinephrine, norepinephrine, growth hormone, and ACTH in addition to more immunological changes over the subsequent twenty-four hour period).
63. See, e.g., Jason Riis et al., *Ignorance of Hedonic Adaptation to Hemodialysis: A Study Using Ecological Momentary Assessment*, 134 J. EXPERIMENTAL PSYCHOL. GEN. 3 (2005) (finding that hemodialysis patients report being just as happy as healthy controls).
64. Levav, *supra* note 61, at 325.
65. *Id.*
66. *Id.*
67. *Id.*
68. *Id.*
69. *Id.* at 325–31.
70. Levav, *supra* note 61 at 325.
71. *Id.* at 326–29.
72. See generally CAROL GRAHAM, *HAPPINESS AROUND THE WORLD: THE PARADOX OF HAPPY PEASANTS AND MISERABLE MILLIONAIRES* (2009).
73. P. Stefan Kruger & Schalk W.P. Engelbrecht, *Happiness around the World: the Paradox of Happy Peasants and Miserable Millionaires*, 5 APPLIED RES. QUALITY LIFE 165, 167 (2010) (reviewing Graham's book).

serves that parents who are poor may revise their own personal expectations downward but maintain hopeful expectations for their children.⁷⁴ Peasants report being happy due to lowered expectations and (perhaps some) hedonic adaptation.⁷⁵ Millionaires report misery due to envy towards even richer people and (perhaps unrealistic) higher expectations.⁷⁶ To what extent should law be more concerned over self-reported unhappiness of rich people or about increasing self-reported happiness of poor folks? Should it encourage or nudge poor individuals to expect more of their future? Aspirations and expectations about future circumstances in relation to reference points of current situations can obviously influence self-assessments and self-reports of happiness.⁷⁷

It should be unsurprising, based upon personal introspection, that objective outcomes and subjective experiences are often interrelated.⁷⁸ Furthermore, they can exhibit potentially complex interactions⁷⁹ and non-linear dynamics.⁸⁰ Huang analyzes empirical and experimental evidence demonstrating that investors' moods influence their financial behavior,⁸¹ and he provides a case study, empirical and experimental data, and theoretical models of how irrational anxiety and exuberance changes behaviors and beliefs in securities markets.⁸² Economics, law, and policy emphasize such objective outcomes as economic development, growth, and progress. However, this emphasis is due—at least in part—to such variables being observable to and verifiable by third parties. A historical and traditional suspicion about subjec-

74. *Id.*

75. *See id.* at 168.

76. *See id.*

77. *See id.*

78. *See generally* Peter H. Huang, *How Do Securities Laws Influence Affect, Happiness, & Trust?*, 3 J. BUS. & TECH. L. 257 (2008).

79. Rosenberg, *supra* note 23, at 1236–43 (explaining how people's behavior, feelings, perceptions and thoughts influence, and are influenced by, each other as part of interacting systems, self-fulfilling prophecies, and often colliding systems).

80. *See, e.g.*, Barbara L. Fredrickson & Marcial F. Losada, *Positive Affect and the Complex Dynamics of Human Flourishing*, 60 AM. PSYCHOLOGIST 678, 679–85 (2005) (arguing that a ratio of at least 2.9 in positive to negative affect characterizes flourishing as opposed to languishing individuals, teams, relationships, and mental health).

81. *See, e.g.*, Peter H. Huang, *Moody Investing and the Supreme Court: Rethinking the Materiality of Information and Reasonableness of Investors*, 13 SUP. CT. ECON. REV. 99, 102–08 (2005).

82. Peter H. Huang, *Regulating Irrational Exuberance and Anxiety in Securities Markets*, in THE LAW AND ECONOMICS OF IRRATIONAL BEHAVIOR 501, 505–18 (Francesco Paresi & Vernon L. Smith eds., 2005).

tive variables is attributable to them being unobservable to and unverifiable by third parties. But, as economist Andrew J. Oswald cogently observes:

Economic performance is not intrinsically interesting. No one is concerned in a genuine sense about the level of gross national product last year or about next year's exchange rate. People have no innate interest in the money supply, inflation, growth, inequality, unemployment, and the rest. The stolid greyness of the business pages of our newspapers seems to mirror the fact that economic numbers matter only indirectly. The relevance of economic performance is that it may be a means to an end. That end is not the consumption of beefburgers, nor the accumulation of television sets, nor the vanquishing of some high level of interest rates, but rather the enrichment of mankind's feeling of well-being. Economic things matter only in so far as they make people happier.⁸³

There is a lively debate over whether governments can easily and pragmatically utilize happiness research in determining policy, and if so, how this can be accomplished.⁸⁴ Professors Kahneman and Sugden introduce a methodology of policy evaluation, based on experienced utility, to environmental economics.⁸⁵ This methodology avoids well-known problems of preference anomalies for contingent valuation studies.⁸⁶ Law in general should incorporate, measure, quantify, and take into account emotional impacts that include but are not limited to just happiness.⁸⁷ Former French President Nico-

83. Andrew J. Oswald, *Happiness and Economic Performance*, 107 *ECON. J.* 1815, 1815 (1997).

84. See, e.g., Ryan Blitstein, *Should the Government Make Us Happy*, MILLER-MCCUNE, May 19, 2008, at 36–45, available at <http://www.psmag.com/navigation/books-and-culture/should-the-government-make-us-happy-2-4541/> (asking why the U.S. government has not yet followed European and other governments in applying happiness research to policy); John F. Helliwell & Christopher P. Barrington-Leigh, *Viewpoint: Measuring and Understanding Subjective Well-Being*, 43 *CAN. J. ECON.* 729, 745–48 (2010) (proposing applications of different subjective well-being measures to policy and providing particular examples in macroeconomic and microeconomic settings); Rick Swedloff, *The Trouble with Happiness*, 86 *TEMPLE L. REV.* 763 (2014) (arguing that empirical happiness research cannot inform policy without additional and significant theoretical foundational undergirding about the meaning of well-being and temporal differences in happiness).

85. See generally Daniel Kahneman & Robert Sugden, *Experienced Utility as a Standard of Policy Evaluation*, 32 *ENVTL. & RESOURCE ECON.* 161, 161–77 (2005) (exploring this possibility).

86. *Id.*

87. Huang, *How Do Securities Laws Influence Affect, Happiness, & Trust?*, *supra* note 78, at 308 (making this proposal).

las Sarkozy recently created a commission on the measurement of economic performance and social progress.⁸⁸ It is chaired by 2001 Nobel Laureate in Economics, Joseph E. Stiglitz.⁸⁹ In a report, this commission recommended that, “[m]easures of both objective and subjective well-being provide key information about people’s quality of life. Statistical offices should incorporate questions to capture people’s life evaluations, hedonic experiences and priorities in their own survey.”⁹⁰ Economists Sonja C. Kassenboehmer and Christoph M. Schmidt analyzed quality-of-life indicators that are suggested in the Stiglitz Report.⁹¹ They found that much of the variation in many well-being measures is already well-captured by such traditional economic indicators as GDP and the unemployment rate.⁹² But because the correlation of alternative indicators with monetary measures is far from perfect, there is room to augment traditional statistical reporting by non-standard indicators.⁹³

British Prime Minister David Cameron recently announced similar plans to collect national well-being measures that incorporate life satisfaction.⁹⁴ Economists Marc Fleurbaey and Didier Blanchet critically analyze various alternatives to GDP, including subjective well-being indexes.⁹⁵ Oswald argues that countries are capable of and should measure their emotional prosperity and focus on mental well-being.⁹⁶ Oswald summarizes seven studies that suggest emotional prosperity and broad measures of psychological well-

88. See COMMISSION ON THE MEASUREMENT OF ECONOMIC PERFORMANCE AND SOCIAL PROGRESS, <http://www.stiglitz-sen-fitoussi.fr/en/index.htm> (last visited Nov. 15, 2014).

89. *The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2001*, NOBELPRIZE.ORG, http://nobelprize.org/nobel_prizes/economics/laureates/2001/ (last visited Nov. 15, 2014).

90. Joseph E. Stiglitz et al., *Report by the Commission on the Measurement of Economic Performance and Social Progress*, COMMISSION ON THE MEASUREMENT OF ECONOMIC PERFORMANCE AND SOCIAL PROGRESS 16, http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf (last visited Nov. 15, 2014).

91. See generally Sonja C. Kassenboehmer & Christoph M. Schmidt, *Beyond GDP and Back: What is the Value-Added by Additional Components of Welfare Measurement?* (Inst. for the Study of Labor, Discussion Paper No. 5453, Jan. 2011), available at <http://ftp.iza.org/dp5453.pdf> (providing this analysis).

92. *Id.* at 2.

93. *Id.* at 3.

94. Mark Whitehouse, *Nations Seek Success Beyond GDP*, WALL ST. J. (Jan. 10, 2011, 12:01 AM), <http://online.wsj.com/article/SB10001424052748704064504576070343252409876.html>.

95. MARC FLEURBAEY & DIDIER BLANCHET, *BEYOND GDP: MEASURING WELFARE AND ACCESSING SUSTAINABILITY* (2013).

96. Andrew J. Oswald, *Emotional Prosperity and the Stiglitz Commission*, 48 BRIT. J. INDUS. REL. 651, 653–60 (2010) (presenting arguments in favor of measuring a nation’s emotional prosperity).

being have recently been declining over time.⁹⁷ Combining data on consumption, inequality, leisure, and mortality, economists Charles I. Jones and Peter J. Klenow propose a simple summary statistic for a country's flow of well-being.⁹⁸ Economists Frey and Stutzer caution that a policy of maximizing aggregate happiness faces many difficulties including reducing people merely to happiness metric stations as well as discounting problems with political institutions and incentive distortion.⁹⁹ Instead, they propose two practical ways to use happiness research in policy: (1) identifying institutions that best assist people in achieving their personal goals, which in turn contributes maximally to individual happiness, and (2) providing crucial informational input to the political discussion process.¹⁰⁰ Instead of maximizing a measure of aggregate happiness, it might be more politically feasible to minimize a measure of aggregate misery, stress, or unhappiness,¹⁰¹ such as the U-index,¹⁰² which measures the fraction of time that people spend experiencing unpleasant emotions. The U-index provides empirical information about negative emotional experiences that may be important to society. Another way to incorporate happiness data into policy analysis is by introducing maximum levels of a measure of unhappiness or minimum levels of a measure of happiness as constraints on government policies. In order to be viable, government policies would be required to satisfy these constraints when optimizing some objective function or goal besides happiness or unhappiness. This approach is analogous to philosopher Robert Nozick's approach to incorporating rights as constraints that are not to be violated, as opposed to rights as part of a policy goal to be optimized.¹⁰³ Professor De Prycker believes that actual incorporation of happiness research into policy implicates a number of value-loaded

97. *Id.* at 660–64 (presenting overviews of these empirical findings).

98. Charles I. Jones & Peter J. Klenow, *Beyond GDP? Welfare across Countries and Time* (National Bureau Econ. Research, Working Paper No. 16352, 2010), available at <http://www.nber.org/papers/w16352> (presenting data showing this although this metric is highly correlated with per capita GDP, there are often economically significant deviations).

99. Bruno S. Frey & Alois Stutzer, *Happiness and Public Choice*, 144 PUB. CHOICE 557, 566–69 (2010).

100. *Id.* at 569–70 (making these proposals).

101. Peter H. Huang & Jeremy A. Blumenthal, *Positive Institutions, Law, and Policy*, in OXFORD HANDBOOK OF POSITIVE PSYCHOLOGY 589, 592 (Shane J. Lopez & C. R. Snyder eds., 2d ed. 2011).

102. Daniel Kahneman & Alan B. Krueger, *Developments in the Measurement of Subjective Well-Being*, 20 J. ECON. PERSP. 3, 19–20 (proposing, defining, and suggesting policy applications of U-index); Kahneman, *supra* note 11, at 393–95.

103. ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 29 (1974).

ethical, ideological, and moral issues.¹⁰⁴ Conversely, Professor Veenhoven believes that empirical research about life satisfaction refutes all theoretical philosophical objections against the greatest happiness principle.¹⁰⁵ Professor Ott maintains that governments can increase average happiness, eventually reduce happiness inequalities, and realize both purposively by non-controversial means.¹⁰⁶

According to psychologist Barbara Fredrickson, benevolent social planners can utilize happiness research by helping people achieve better outcomes and gain greater meaning from their experiences.¹⁰⁷ She observes that:

[N]ormal individuals strive harder—and suffer more costs—to repeat experiences that include high meaning positive affects (e.g. love, interest/flow) than to repeat those that include only low meaning positive affect (e.g. pleasure, comfort). Likewise, they most actively avoid experiences that include high meaning negative affects (e.g. shame, remorse), but may routinely endure those that include only low meaning negative affect (e.g. anxiety, disgust). Moreover, these relations should hold *regardless of affect intensity*. Even moderate intensity episodes of remorse, for example, may be dreaded more than high intensity episodes of anxiety.¹⁰⁸

She further provides a hypothetical of a woman who rates the experience of love she felt while playing in a park with her young son as a seven while separately rating the experience of pleasure she felt eating the best instance of a particular food she has ever had as a ten.¹⁰⁹ Fredrickson observes that such a woman's numerical happiness ratings are likely made on different ordinal scales,¹¹⁰ and thus a benevolent social planner should probably refrain from having that woman spend less time in a park with her son and more time eating that particular food item.¹¹¹ Because people's descriptive labels

104. Valérie De Prycker, *Happiness on the Political Agenda? PROS and CONS*, 11 J. HAPPINESS STUD. 585, 585–600 (2010) (making this argument).

105. Ruut Veenhoven, *Greater Happiness for a Greater Number: Is that Possible and Desirable?*, 11 J. HAPPINESS STUD. 605, 605–27 (2010).

106. See generally Jan Ott, *Greater Happiness for a Greater Number: Some Non-controversial Options for Governments*, 11 J. HAPPINESS STUD. 631 (2010).

107. Barbara L. Fredrickson, *Extracting Meaning from Past Affective Experiences: The Importance of Peaks, Ends, and Specific Emotions*, 14 COGNITION & EMOTION 577, 596–603 (2000).

108. *Id.* at 595.

109. *Id.* at 601.

110. *Id.*

111. *Id.*

for and numerical ratings of affective states are very likely to be imprecise,¹¹² it is likely is reasonable that individuals evaluate moments of love at seven against one set of benchmarks, and moments of pleasure at ten relative to a different set of reference points.¹¹³

Echoing Fredrickson's concerns, behavioral economist George Loewenstein proposes that time-use surveys ask people not just about how much positive and negative affect is felt during a particular activity, but also if people believed that a particular activity was a valuable or worthwhile use of their time as opposed to a waste of their time.¹¹⁴ Psychologists White and Dolan ask people not just about how they felt during a particular activity, but also six additional questions focusing on non-hedonic aspects of experience such as being engaged, being focused, and finding meaning.¹¹⁵ These fundamental insights into how people care not only about positive affect, but also about meaning in their lives, raise questions about whether the law should care more about positive affect versus meaning in people's lives.

A legitimate source of uneasiness about basing social policies upon aggregation of empirical happiness data is a recent quantitative analysis of certain mathematical properties of empirical happiness data that continue to remain contentious among economists¹¹⁶—namely, additivity, cardinality, and neutrality of such data, even though psychologists have been able to address how to make international, interpersonal, and intertemporal comparisons of happiness data to some degree.¹¹⁷ This mathematical analysis also serves to provide a cautionary, persuasive critique of a recent proposal for governments to eschew cost-benefit analysis and instead determine and evaluate policy based upon aggregation of happiness, defined simply as experienced positive feeling.¹¹⁸

A middle-of-the-road position in response to situations and times when indicia of objective outcomes and subjective happiness measures diverge is to privilege neither category of variables. Instead, law can and should take

112. *Id.*

113. Fredrickson, *supra* note 107, at 601.

114. George Loewenstein, *That which Makes Life Worthwhile*, in *MEASURING THE SUBJECTIVE WELL-BEING OF NATIONS: NATIONAL ACCOUNTS OF TIME USE AND WELL-BEING* 87, 104 (Alan B. Krueger ed., 2009).

115. Mathew P. White & Paul Dolan, *Accounting for the Richness of Daily Activities*, 20 *PSYCHOL. SCI.* 1000, 1001–07 (2009).

116. *See generally* Ingebjørg Kristoffersen, *The Metrics of Subjective Wellbeing: Cardinality, Neutrality and Additivity*, 86 *ECON. REC.* 98 (2010) (presenting empirical and theoretical evidence of alternative hypotheses about whether self-reported happiness is cardinal, strictly ordinal, or ratio quality, and hence meaningfully additive).

117. *Id.*

118. *See generally* John Bronsteen et al., *Welfare as Happiness*, 98 *GEO. L.J.* 1583, 1628–41 (2010) (arguing for this proposal).

into account both objective outcomes and self-reports about subjective experiences. If objective outcomes and self-reports about subjective experiences converge, then law can proceed more confidently than if based upon just one category of variables. Alternatively, if objective outcomes and self-reports about subjective experiences disagree, then the law can and should understand why they diverge. Levav explains how divergences in biological versus cognitive processing times of events help categorize biases in predictions of subjective well-being, which in turn has implications for public policy.¹¹⁹ For example, Levav suggests that paternalism could be justified in situations involving environmental pathogens,¹²⁰ because he believes in rejecting any public policy that neglects objective health outcomes just because those outcomes have little or no long-term impact on measures of subjective well-being.¹²¹ In support, Levav observes that even though a doctor usually starts a medical visit by asking patients how they feel (subjective experiences), a doctor then performs a thorough physical health examination that includes taking measures of blood pressure and heart rate (objective outcomes).¹²² Levav concludes that:

[A]n attempt to ascertain the effect of an event or circumstance through measures of affective judgment (that is, through SWB [Subjective Well-Being]) fails to capture sufficiently its consequences. This becomes especially important when extracting public-policy recommendations from responses to SWB questionnaires. Failure to realize the multiple effects of an event and their timing can lead to policies that are detrimental to the goal of increasing a population's well-being.¹²³

B. Moments in Experiences and Memories of Them

"And I don't know if it's a memory, or memory of a memory I'm left with."¹²⁴

Kahneman aptly characterizes people's tendency of remembering and evaluating their happiness differently from how they experience and live. He states a difference between, on the one hand, being happy about or with your life, and on the other hand, being happy in actually living your life.¹²⁵ He attributes this difference to people directing their attention to different aspects of their lives when thinking about life in comparison to actually living

119. Levav, *supra* note 61, at 334–35.

120. *Id.* at 335.

121. *Id.*

122. *Id.*

123. *Id.*

124. EL SECRETO DE SUS OJOS, *supra* note 16.

125. Kahneman, *Experience vs. Memory*, *supra* note 11.

it.¹²⁶ He references a study he and a coauthor conducted, concerning whether living in California can make people happy and happier than living in the Midwest.¹²⁷ Even though groups of college students in California and the Midwest believe that people such as themselves are happier living in California,¹²⁸ both groups actually self-report virtually identical overall experienced happiness.¹²⁹ It is true that Californians are much happier with their weather,¹³⁰ but both groups vastly overestimate how much weather impacts their overall experienced happiness.¹³¹ If Midwestern undergraduates focus on emotional adaptation rather than the weather, their predictions of life satisfaction levels for their peers living in California decrease.¹³²

In his talk, Kahneman engages in a thought experiment to evaluate what happens when people move from Ohio to California to pursue happiness.¹³³ Although he notes that such people's experiencing selves are not happier than before, they nonetheless think they are happier because they will no longer have to endure Ohio's harsh weather.¹³⁴ As a result, people feel they made the right choice to move to California.¹³⁵

But, who is to say they did not? Should we not believe and defer to people's evaluated and remembered happiness when and if that differs from their experienced happiness? After all, people's own (possibly inaccurate) evaluations and (certainly incomplete) memories of their happiness are what ultimately they care about and will both remember and anticipate in comparison with their actual experiences of happiness, which are by necessity only ephemeral, fleeting, and momentary. Even if people are on average no happier in California, there are undeniably objective differences between Ohio

126. *Id.*

127. David A. Schkade & Daniel Kahneman, *Does Living in California Make People Happy? A Focusing Illusion in Judgments of Life Satisfaction*, 9 PSYCHOL. SCI. 340, 341 (1998).

128. *Id.* at 343. But see Peter A. Ubel et al., *Disability and Sunshine: Can Hedonic Predictions Be Improved by Drawing Attention to Focusing Illusions or Emotional Adaptation?*, 11 J. EXPERIMENTAL PSYCHOL.: APPLIED 111, 119–21 (2005) (failing to replicate this finding of Schkade & Kahneman's and instead reporting that University of Michigan undergraduates did not predict higher life satisfaction ratings in California than in Michigan).

129. Schkade & Kahneman, *supra* note 127, at 342–43.

130. See *id.*

131. *Id.* at 343.

132. Ubel et al., *supra* note 128, at 119–22 (presenting details of this research).

133. See Kahneman, *supra* note 11, at 402–03.

134. See *id.*

135. *Id.*

and California,¹³⁶ with some of those differences partially due to weather conditions, such as literally how green is the grass.¹³⁷

1. Self-Reports of Happiness

A central question in happiness research asks “[h]ow do we determine if people enjoy what they do?”¹³⁸ While neoclassical economics relies on people’s choices to reveal their preferences,¹³⁹ psychology and other social sciences rely on self-reports of enjoyment.¹⁴⁰ Self-reports can be divided into three types: (1) global reports;¹⁴¹ (2) concurrently experienced reports,¹⁴² based upon the Experience Sampling Method (ESM),¹⁴³ which has developed a reputation for being the gold standard of self-report procedures due to its contemporaneous and immediate nature;¹⁴⁴ and (3) recent retrospective re-

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136. Levav, *supra* note 61, at 315 (contrasting psychologists finding little or no correlation between experienced happiness and objective circumstances with physicians finding circumstances and life events being highly related to physical and mental health).
 137. “I know a place where the grass is really greener.” KATY PERRY, *California Gurls*, on *TEENAGE DREAM* (Capital Records 2010).
 138. Norbert Schwarz et al., *Global and Episodic Reports of Hedonic Experience*, in *CALENDAR AND TIME DIARY METHODS IN LIFE COURSE RESEARCH* 157, 157 (Robert F. Belli, Frank P. Stafford, & Duane F. Alwin eds., 2009).
 139. See Richard A. Epstein, *Happiness and Revealed Preferences in Evolutionary Perspective*, 33 VT. L. REV. 559, 561, 567–71 (2009) (criticizing and questioning general conclusions of happiness literature to argue for neoclassical economics’ traditional emphasis on revealed preferences).
 140. Schwarz et al., *supra* note 138, at 157.
 141. F. THOMAS JUSTER, *TIME, GOODS, AND WELL-BEING* (Frank P. Stafford ed., 1985); JOHN P. ROBINSON, *HOW AMERICANS USE TIME: A SOCIAL-PSYCHOLOGICAL ANALYSIS OF EVERYDAY BEHAVIOR* (1977).
 142. See, e.g., Arthur A. Stone et al., *Ecological Momentary Assessment*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY* 26 (Daniel Kahneman, Ed Diener, & Norbert Schwarz eds., 1999) (advocating usefulness of momentary assessment of experiences, or Ecological Momentary Assessment (EMA) as they name it, by discussing problems of traditional retrospective perspective and comparing these with advantages of momentary, or nearly immediate, measurement forms of self-reporting, and convincingly arguing for benefits of EMA, including new insights in such areas as stress and coping, mood and physiological processes, and psychiatric symptoms); Saul Shiffman et al., *Ecological Momentary Assessment*, 4 ANN. REV. CLINICAL PSYCHOL. 1 (2008) (discussing the rationale for EMA, its designs, methodological and practical issues, and comparisons of EMA with recall data).
 143. See, e.g., JOEL M. HEKTER ET AL., *EXPERIENCE SAMPLING METHOD: MEASURING THE QUALITY OF EVERYDAY LIFE* 277 (2006).
 144. But see Tamlin S. Conner et al., *Idiographic Personality: The Theory and Practice of Experience Sampling*, in *HANDBOOK OF RESEARCH METHODS IN*

ports, such as the Day Reconstruction Method (DRM)¹⁴⁵ and the Event Reconstruction Method (ERM).¹⁴⁶ Global reports of enjoyment usually converge with choices, but neither may capture people's actual experience in situ.¹⁴⁷ Concurrent and retrospective episodic reports converge with actual hedonic experiences, but can fail to predict behaviors and choices.¹⁴⁸ Researchers can influence their data and conclusions by using a specific type of report. For example, according to a DRM study, employed people self-report higher life satisfaction than those who are unemployed.¹⁴⁹ They also report more positive feelings when participating in similar activities.¹⁵⁰ But upon weighting these activities with their duration, average experienced utility between the employed and unemployed does not differ.¹⁵¹ Unemployed people compensate for such a saddening effect by spending time in more pleasurable ways while the employed work.¹⁵²

While people's fleeting and momentary feelings can be accessed by introspection for accurate concurrent emotional reporting based upon experiential information, global reports of previous emotions are reconstructed based upon semantic knowledge drawing upon general beliefs about emotions and situations.¹⁵³ Reports about recent specific episodes are between real-time and past emotional reports.¹⁵⁴ People can use recent specific episode reports to draw upon episodic memory to retrieve specific details and moments from their recent past.¹⁵⁵

PERSONALITY PSYCHOLOGY 79, 91–92 (Richard W. Robbins, R. Chris Fraley & Robert F. Krueger eds., 2007) (arguing that ESM is not inherently better than other types of self-reporting procedure, just different; sometimes inappropriate depending on circumstances, and suffers the same limitations facing other self-reporting procedures).

145. Daniel Kahneman et al., *A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method*, 306 SCI. 1776 (2004).

146. Schwarz et al., *supra* note 138, at 162.

147. *Id.* at 158.

148. *Id.* at 159.

149. Andreas Knabe et al., *Dissatisfied with Life but Having a Good Day: Time-Use and Well-being of the Unemployed*, 120 ECON. J. 867, 875–85 (2010) (reporting results of the research).

150. *Id.*

151. *Id.*

152. *Id.* at 876, 879.

153. Schwarz et al., *supra* note 138, at 159.

154. *See id.*

155. *Id.*

2. Duration Neglect and the Peak-and-End Rule

People's retrospective global evaluations of such aversive experiences as being exposed to continuous mild noise, carrying weights, maintaining a strained posture, or wearing a breathing apparatus all follow a peak-end rule.¹⁵⁶ Across many types of affective experiences, people's memories neglect duration and focus instead on their peak affect intensity and the ending of the memory.¹⁵⁷ A peak-end rule means that global retrospective evaluations can be predicted by a weighted average of peak affect during an experience and value of affect upon the end of an experience.¹⁵⁸ Evidence of the peak-end rule is supported by the retrospective reactions people have to their diverse affective experiences such as undergoing a colonoscopy,¹⁵⁹ receiving gifts of DVDs or Halloween candy,¹⁶⁰ immersing a hand in cold water,¹⁶¹ enduring lithotripsies,¹⁶² and viewing aversive and pleasant film clips.¹⁶³

Fredrickson proposes that people focus on affective peaks and ends not due to perceptual salience, rather, because people are carriers of personal meaning.¹⁶⁴ She proposes that people remember moments of peak affect from an experience because those moments provide them information of their per-

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156. Carol Varey & Daniel Kahneman, *Experiences Extended Across Time: Evaluation of Moments and Episodes*, 5 J. BEHAV. DECISION MAKING 169, 172–84 (1992).
 157. See, e.g., Fredrickson, *supra* note 107, at 577–96 (reviewing empirical research about peak-end rule to conclude that data in support of peak-and-end rule is robust, but qualified by such other aspects of affective experiences as trends and velocity of intensity changes that also predict global evaluations of episodes).
 158. But see Talya Miron-Shatz, *Evaluating Multiepisode Events: Boundary Conditions for the Peak-End Rule*, 9 EMOTION 206, 208–12 (2009) (reporting that for multi-episode events, retrospective evaluations consider subjectively experienced lows, and sometimes peaks, depend on averaged ratings of emotions, ignore ends; additionally, lows and peaks contribute more to comparative as opposed to absolute evaluations).
 159. Donald A. Redelmeier et al., *Memories of Colonoscopy: A Randomized Trial*, 104 PAIN 187, 188–93 (2003).
 160. Amy M. Do et al., *Evaluations of Pleasurable Experiences: The Peak-End Rule*, 15 PSYCHONOMIC BULL. & REV. 96, 96–98 (2008).
 161. Daniel Kahneman et al., *When More Pain is Preferred to Less: Adding a Better End*, 4 PSYCHOL. SCI. 401, 401–04 (1993).
 162. Donald A. Redelmeier & Daniel Kahneman, *Patients' Memories of Painful Medical Treatments: Real-Time and Retrospective Evaluations of Two Minimally Invasive Procedures*, 66 PAIN 3, 4–7, fig.1, tbls.I, II, & III (1996).
 163. Barbara L. Fredrickson & Daniel Kahneman, *Duration Neglect in Retrospective Evaluations of Affective Episodes*, 65 J. PERSONALITY & SOC. PSYCHOL. 45, 46–55 (1993).
 164. Fredrickson, *supra* note 107, at 589–90.

sonal capacity to achieve, endure, or cope with that experience again.¹⁶⁵ She proposes that people remember moments of ending affect from an experience because those moments convey that an experience is complete, knowable, over, past, and thus now accessible with relative certainty.¹⁶⁶

Based upon psychological research findings about duration neglect, criminal law professor Paul Robinson and psychology professor John Darley argue that society is not likely to deter criminals by lengthening prison sentences.¹⁶⁷ Law professor Thomas Ulen very sensibly responds:

The suggestion is that it does not matter whether we put people into some sort of unpleasant confinement for a year, three years, or five years; that is not what they are going to remember about their incarceration. Rather, they are more likely to remember the “peak-and-end” experiences. As a result, they argue, making punishment more certain or more severe is not going to have any deterrence effect on criminals.

That conclusion strikes me as far-fetched, to say the least. And it also suggests that if they wanted to pursue this further, then we ought to confine criminals, no matter how hideous the crime, for a relatively short time (thereby saving valuable resources), but make sure that on their way out of prison we beat the daylight out of them so that the last thing they remember is something extremely unpleasant. So, no matter how long the imprisonment lasted, the now-released prisoners do not want to repeat it again—just as the vacationer does not want to return to the Caribbean, no matter how nice the vacation truly was, if the central memory he has of that trip is of lost luggage. Now, that seems to me a facile application of what is a potentially very interesting psychological finding.¹⁶⁸

Law Professor Jeremy A. Blumenthal points out that even death row inmates can adapt hedonically to prison¹⁶⁹ and relatives of crime victims can adapt hedonically to losing a loved one.¹⁷⁰ It is worth pointing out that it is also

165. *Id.* at 590–91.

166. *Id.* at 591–93.

167. Paul H. Robinson & John M. Darley, *Does Criminal Law Deter? A Behavioral Science Investigation*, 24 OXFORD J. LEGAL STUD. 173, 189–92 (2004).

168. Thomas S. Ulen, *Remarks on the Lewis & Clark Law School Business Law Forum: Behavioral Analysis of Corporate Law: Instruction or Distraction?*, 10 LEWIS & CLARK L. REV. 177, 183 (2006).

169. Jeremy A. Blumenthal, *Law and the Emotions: The Problems of Affective Forecasting*, 80 IND. L.J. 155, 45–51 (2005) (analyzing implications for capital punishment of affective forecasting errors about hedonic adaptation).

170. *Id.* at 39–42 (analyzing implications for victim impact statements of affective forecasting errors about hedonic adaptation).

unknown how much inmates vary in their memories of punishment experiences and upon what that variation depends.¹⁷¹

i. Benefits of Incomplete Emotional Memories

People's emotional memories depend upon their current emotional state, their perceptions and appraisals of past experiences, their coping mechanisms, and their personality traits.¹⁷² Psychologists Linda Levine, Martin Safer, and Heather Lench assert that misremembering emotions by focusing on affective peaks and ends of past experiences can promote such goal-directed behavior as authoring articles, climbing mountains, conducting research, having children, and raising children.¹⁷³ They also explain how incomplete and inaccurate affective memories also can facilitate people's abilities to cope with ongoing challenges,¹⁷⁴ such as coping with a spouse's midlife death,¹⁷⁵ maintaining positive long-term relationships,¹⁷⁶ and undergoing psychotherapy.¹⁷⁷ In fact, even implicit measures of couples' affective memories of their marriage can predict divorce better than observational measures of marital problem-solving and better than self-reports of current marital satisfaction that can be informed by explicit memories.¹⁷⁸

171. *Id.*

172. Linda J. Levine & Martin A. Safer, *Sources of Bias in Memory for Emotions*, 11 CURRENT DIRECTIONS PSYCHOL. SCI. 169, 169–72 (2002) (providing and reviewing supporting empirical evidence).

173. Linda J. Levine et al., *Remembering and Misremembering Emotions*, in JUDGMENTS OVER TIME: THE INTERPLAY OF THOUGHTS, FEELINGS, AND BEHAVIORS 271, 282–83 (Lawrence J. Sanna & Edward C. Chang eds., 2006).

174. *Id.* at 283–84.

175. Martin A. Safer et al., *"It Was Never that Bad": Biased Recall of Grief and Long-Term Adjustment to the Death of a Spouse*, 9 MEMORY 195, 197–203 (2001).

176. Benjamin R. Karney & Robert H. Coombs, *Memory Bias in Long-Term Close Relationships: Consistency or Improvement*, 26 PERSONALITY & SOC. PSYCHOL. BULL. 959, 961–69 (2000) (presenting details of this research). See also Susan Sprecher, *"I Love You More Today than Yesterday": Romantic Partners' Perception of Changes in Love and Related Affect Over Time*, 76 J. PERSONALITY & SOC. PSYCHOL. 46, 47–52 (1999) (presenting details of a study finding that romantic partners' reports about perceived changes in their love, commitment, and satisfaction correlate positively with actual changes in their love, commitment, and satisfaction in addition to future relationship stability).

177. Martin A. Safer & David J. Keuler, *Individual Differences in Misremembering Pre-Psychotherapy Distress: Personality and Memory Distortion*, 2 EMOTION 162, 164–75 (2002).

178. Kim Therese Buehlman et al., *How A Couple Views Their Past Predicts Their Future: Predicting Divorce from an Oral History Interview*, 5 J. FAM. PSYCHOL. 295, 297–318 (1992).

People undergo a myriad of powerful emotional ups and downs every day, hour, and sometimes even within a few moments.¹⁷⁹ Thereby having a memory system that preserves all of a person's minute details of every experience would prove unduly burdensome to function as a guide for future behaviors, intentions, and preferences.¹⁸⁰ Additionally, if people's beliefs, circumstances, and goals undergo change, their more distant emotional memories are not as likely to be relevant as their more recent memories.¹⁸¹ That people's affective memories fade with time is therefore at least efficient and is at most evolutionarily adaptive.¹⁸²

People's emotions are not only their internal states of arousal and valence, but they also signal perceived relationships between people's circumstances and their beliefs, goals, and values.¹⁸³ Only by conceptualizing people's emotional memories as records of their actual historical internal states does it follow that reconstructing emotional memories is doomed to suffer from biases and inaccuracies.¹⁸⁴ But, a realization that emotional memories record ongoing relationships between past events and a person's goals implies that such emotional records are more accurate if one updates them based upon his or her current goals and beliefs.¹⁸⁵ As Levine, Safer, and Lench nicely state it, "[i]n the same way, updating a map when new roads are built makes it more accurate."¹⁸⁶ Memory's chief purpose could be to guide people's future behavior instead of being a faithful record of their past.¹⁸⁷ Because people's current appraisals of an experience inform their emotional memories, those memories can better function to guide their future behavior.¹⁸⁸ As Levine and Safer conclude, "[p]eople's memories for emotions provide highly condensed and accessible summaries of the relevance of past experiences to current goals."¹⁸⁹

179. Levine et al., *supra* note 173, at 280.

180. *Id.*

181. *Id.*

182. Robert W. Hendersen, *Fearful Memories: The Motivational Significance of Forgetting*, in AFFECT, CONDITIONING, AND COGNITION: ESSAYS ON THE DETERMINANTS OF BEHAVIOR 43, 44-53 (F. Robert Brush & J. Bruce Overmier eds., 1985) (reviewing evidence suggesting that interpreting memories of important events necessitates understanding motivational significance of such memories); Daniel L. Schacter, *The Seven Sins of Memory: Insights from Psychology and Cognitive Neuroscience*, 54 AM. PSYCHOLOGIST 182, 196-97.

183. Levine et al., *supra* note 173, at 280.

184. *Id.*

185. *Id.*

186. *Id.*

187. *Id.*

188. *Id.*

189. Levine & Safer, *supra* note 172, at 169.

Neuroscientists Larry Cahill, James McGaugh, and Elizabeth Parker discovered that a few people can recall detailed moment-to-moment events from their entire lives.¹⁹⁰ They proposed the word “hyperthymesia” to describe such extremely superior autobiographical memory.¹⁹¹ Actress Marilu Henner, who is perhaps best known for her starring role as Elaine O’Connor-Nardo on the popular television program “Taxi,”¹⁹² is the only one of six Americans diagnosed to have such nearly endless memories,¹⁹³ that has children or is married (her current marriage is her third). This suggests that having a good relationship could be related to being able to forget, and hence lose, some arguments.¹⁹⁴

Psychologist Pascal Boyer suggests that “distorted” memories can be part of a highly efficient and functional biological system that balances costs of information storage and retrieval of past experiences against benefits of utilizing memories to improve present fitness-enhancing decision-making.¹⁹⁵ Incomplete and selective memories, viewed as beliefs about past occurrences, can thus be seen to be particular examples of functionally adaptive misbeliefs generally.¹⁹⁶ Viktor Mayer-Schönberger, a professor of internet governance and regulation, explains how forgetting played important roles during the history of humankind, ranging from facilitating forgiveness that provided opportunities for second chances to helping people make sound decisions that were not encumbered by their past.¹⁹⁷ He also analyzes how digital technology makes it possible to end forgetting and illustrates problems from and solutions to everlasting digital memory.¹⁹⁸

190. Elizabeth S. Parker et al., *A Case of Unusual Autobiographical Remembering*, 12 NEUROCASE 35 (2006).

191. *Id.* at 47.

192. *Taxi* (ABC, NBC television series 1978–1983).

193. Alexandra Cheney, *Marilu Henner on Her Extraordinary Memory*, WALL ST. J. BLOG (Dec. 22, 2010, 9:00 AM), <http://blogs.wsj.com/speakeasy/2010/12/22/marilu-henner-explains-her-amazing-memory/>.

194. *60 Minutes: The Gift of Endless Memory* (CNN television newsmagazine broadcast Dec. 16, 2010), available at <http://www.cbsnews.com/news/the-gift-of-endless-memory/> (last visited Nov. 15, 2014) (suggesting this possibility).

195. Pascal Boyer, *Extending the Range of Adaptive Misbelief: Memory “Distortions” as Functional Features*, 32 BRAIN & BEHAV. SCI. 513, 513–14 (2009).

196. Ryan T. McKay & Daniel C. Dennett, *The Evolution of Misbelief*, 32 BRAIN & BEHAV. SCI. 493 (2009).

197. See generally VIKTOR MAYER-SCHÖNBERGER, *DELETE: THE VIRTUE OF FORGETTING IN THE DIGITAL AGE* (2009).

198. *Id.*

ii. *Waiting, Anticipation, and Reconstruction*

People consistently neglect duration in making overall judgments of a character's quality of life, and instead emphasize how characters' lives end.¹⁹⁹ This produces ratings that contradict a simplistic hedonic calculus that just adds up years of pleasure and pain.²⁰⁰ People display a "James Dean Effect," whereby they rate a wonderful life that ends abruptly as being better than a wonderful life having additional but only mildly pleasant years.²⁰¹ People also exhibit an "Alexander Solzhenitsyn Effect," in which they rate a terrible life with additional moderately bad years as being more desirable than a terrible life that ends abruptly without having those unpleasant years.²⁰² In contrast, people show evidence of weaker effects for a life having additional but less intense years embedded between ages forty and forty-five instead of at its end.²⁰³ This indicates that a life's end has special importance and that its effect on people's quality of life judgments is not just due to averaging different periods of life.²⁰⁴

This empirical happiness research about how a life's end takes on unique significance in life evaluation echoes Aristotle's observation in *Nicomachean Ethics*.²⁰⁵ In this work, Aristotle notes that "since many changes occur in life, and all manner of chances, and the most prosperous may fall into great misfortunes in old age, as is told of Priam in the Trojan Cycle; and one who has experienced such chances and has ended wretchedly no one calls happy."²⁰⁶

Posthumous reversals of fortune change external evaluators' assessments of happiness and quality of life judgments in the same direction as the valence of a posthumous event, independent of people's religiosity or how much a life made a good or engaging story.²⁰⁷ People's quality of life judgments being dependent upon posthumous events could be a special instance of a more general process of retroactive re-evaluation of a particular event's

199. *Id.*

200. Ed Diener et al., *End Effects of Rated Life Quality: The James Dean Effect*, 12 *PSYCHOL. SCI.* 124 (2001) (presenting details of three studies demonstrating these findings).

201. *Id.* at 127.

202. *Id.*

203. *Id.* at 126.

204. *Id.* at 127.

205. ARISTOTLE, *NICOMACHEAN ETHICS* (W. D. Ross, trans., World Library Classics 1998).

206. *Id.*

207. Paul Rozin & Jennifer Stellar, *Posthumous Events Affect Rated Quality and Happiness of Lives*, 4 *JUDGMENT & DECISION MAKING* 273, 275–78 (2009) (presenting two such empirical studies).

effect or meaning after some other event.²⁰⁸ For example, if a person learns after spending a terrific evening with that person's spouse, that the spouse was unfaithful, that person's memories of that evening can become very negative.²⁰⁹ More broadly, as we change our attitudes or feelings towards anything, it is likely that our memories of related earlier times are going to change also.²¹⁰

In constructing their autobiographical selves, people shift back memories of their moral failings and shift forward their memories of morally good behavior.²¹¹ People are also able to maintain usually favorable self-regard via disparagement of their distant past selves and complimenting of their recent past selves.²¹² People appear to like seeing themselves as evolving into better future selves and situate themselves differently in time than how they situate others.²¹³ Based upon extensive clinical studies, narrative psychologist Dan McAdams persuasively argues that redemption is a unique theme of American autobiographical stories.²¹⁴

Kahneman expresses concern over evaluations of past experiences because they are incorrect due to fallible memories and can result in choices that do not maximize people's experienced affect.²¹⁵ Kahneman proposes that a true measure of an experience can be derived only upon a moment-to-moment sampling of an individual's feelings during that experience.²¹⁶ Schreiber and Kahneman distinguish between instantaneous utility, consisting of people's on-line feelings about moments in their lives, and remembered utility, entailing how poorly or well a whole event is

208. *Id.* at 278.

209. *Id.*

210. *Id.*

211. Jessica R. Escobedo & Ralph Adolphs, *Becoming a Better Person: Temporal Remoteness Biases Autobiographical Memories for Moral Events*, 10 *EMOTION* 511, 514–18 (2010) (presenting details of this research).

212. Anne E. Wilson & Michael Ross, *From Chump to Champ: People's Appraisals of Their Earlier and Present Selves*, 80 *J. PERSONALITY & SOC. PSYCHOL.* 572, 572–83 (2001) (presenting and testing via six experimental studies a theory of temporal self-appraisal).

213. Benedict Carey, *Why Discretions Appear Youthful*, *N.Y. TIMES*, Oct. 5, 2010, at D1 (reporting on these and related research findings).

214. *See generally* DAN MCADAMS, *THE REDEPTIVE SELF: STORIES AMERICANS LIVE BY* (2005) (discussing the importance of redemption in American society).

215. DANIEL KAHNEMAN, *CHOICES, VALUES, AND FRAMES* 767–72 (Daniel Kahneman & Amos Tversky eds., 2000).

216. *Id.* at 694.

remembered to have been after it already happened.²¹⁷ Kahneman's viewpoints about people's experiences and self-evaluations as competing normative guides for people and social policies have undergone change and evolution over time.²¹⁸ This is a response to developments in his own and others' empirical research about happiness²¹⁹ and hedonic adaptation.²²⁰

As Loewenstein and philosopher Jon Elster observe,²²¹ moral philosopher Jeremy Bentham realized that many experiences of pleasure and pain are due not to direct experiences, but instead to anticipations and memories of experiences.²²² Differences in how people remember versus experience happiness raises a fundamental normative question of which one, if either, is more important. Maximizing experienced affect over memories of them raises a number of issues and questions.²²³ Kahneman's economics Nobel lecture discussed how people's global evaluations of episodes over time suffer from biases in comparison with their actual experienced affect.²²⁴ Kahneman and Riss "urged that the experiencing self be given due regard in

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217. Charles A. Schreiber & Daniel Kahneman, *Determinants of the Remembered Utility of Aversive Sounds*, 129 J. EXPERIMENTAL PSYCHOL.: GEN. 27, 27 (2000) (introducing this dichotomy).
 218. Daniel Kahneman, From Decision Utility to Experienced Happiness, Invited Address, Emotion Pre-Conference to Annual Meeting of the Society for Personality and Social Psychology (Jan. 27, 2011) (describing his distinction between "emotional experience and life evaluation as aspects of well-being, with their distinctive precursors and consequences"), available at <http://www.tufts.edu/~hurry01/emotionpreconference/speakers.html> (last visited Nov. 15, 2014).
 219. See, e.g., Daniel Kahneman, *The Sad Tale of the Aspiration Treadmill*, EDGE WORLD QUESTION CENTER, http://www.edge.org/q2008/q08_17.html#kahneman (describing how and why Kahneman gave up on the idea of an aspiration treadmill) (last visited Nov. 15, 2014).
 220. Daniel Kahneman, *What Constitutes Life Satisfaction?*, in WHAT HAVE YOU CHANGED YOUR MIND ABOUT? TODAY'S LEADING MINDS RETHINK EVERYTHING 199–200 (John Brockman ed., 2009) (describing Kahneman's changing his views about hedonic adaptation).
 221. JON ELSTER & GEORGE LOEWENSTEIN, CHOICE OVER TIME, 213, 213–14 (George F. Loewenstein & Jon Elster eds., 1992).
 222. JEREMY BENTHAM, THE PRINCIPLES OF MORALS AND LEGISLATION 28 (Jonathan Bennett ed., 2010) (1789).
 223. Joel Huber et al., *Thinking about Values in Prospect and Retrospect: Maximizing Experienced Utility*, 8 MARKETING LETTERS 323, 327–29, 332 (1997) (discussing these issues and research questions).
 224. Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 AM. ECON. REV. 1449, 1465–66 (2003).

well-being research.”²²⁵ Carmon and Kahneman believe that situations in which experiences can be more crucial than memories include painful medical procedures and waiting in queues.²²⁶ Influential designer Don Norman believes that memories are more crucial than experiences in waiting lines,²²⁷ queue design,²²⁸ and generally overall.²²⁹

In a fascinating article, organizational psychologist and management scholar Robert Sutton hypothesizes that visitors to Disneyland are likely to remember and report positive bygone feelings they experienced during their visits, but forget and fail to report negative ones.²³⁰ Sutton posits that well-documented psychological forces explain such inaccurate reconstruction of people’s emotions: (1) a Pollyanna effect; (2) editing of memories to maintain cognitive consistency; and (3) pressures of social norms in reconstructing past feelings.²³¹ Sutton also suggests that these somewhat inaccurate positive anticipations, experiences, and memories of most events in life can be healthy and self-fulfilling.²³²

This inclination to remember pleasant feelings but forget unpleasant ones is accentuated by people taking photographs during their visits.²³³ Memories and photographs of moments in our lives are intimately related. As novelist Milan Kundera states about how people remember love affairs,

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225. Daniel Kahneman & Jason Riis, *Living, and Thinking about It: Two Perspectives on Life*, in *THE SCIENCE OF WELL-BEING* 285, 300 (Felicia A. Huppert et al. eds., 2005).
226. Ziv Carmon & Daniel Kahneman, *The Experienced Utility of Queuing: Real-Time Affect and Retrospective Evaluations of Simulated Queues* 21 (1995) (unpublished manuscript), available at <http://faculty.insead.edu/carmon/pdf/files/The%20Experienced%20Utility%20of%20Queuing.pdf> (last visited Oct. 10, 2014).
227. Donald A. Norman, *The Psychology of Waiting Lines*, 15 (Aug. 21, 2008) (excerpt from an unpublished manuscript entitled “Sociable Design”), available at <http://www.jnd.org/ms/Norman%20The%20Psychology%20of%20Waiting%20Lines.pdf>.
228. Donald A. Norman, *Designing Waits That Work*, MIT SLOAN MGMT. REV. 23, 26–27 (Summer 2009) (emphasizing importance of managing memories rather than experiences themselves in design of waiting lines).
229. See generally Donald A. Norman, *Memory Is More Important than Actuality*, 16 INTERACTIONS 24 (2009).
230. See Sutton, *supra* note 6, at 279–80.
231. *Id.* at 280–81.
232. *Id.* at 281–84.
233. *Id.* at 285–86; see also Shelly E. Taylor & J D. Brown, *Illusion and Well-Being: A Social-Psychological Perspective on Mental Health*, 103 PSYCHOL. BULL. 193 (1998) (analyzing research literature to conclude that unrealistic positive illusions promote mental health).

“memory does not make films, it makes photographs.”²³⁴ Perhaps to capitalize on this, Disneyland and Walt Disney World launched a marketing campaign²³⁵ in 2010 to feature vacationers’ photographs and videos in television commercials and social media.

Furthermore, psychological research explains why people repeat and recommend experiences, even if such experiences involve unpleasant moments.²³⁶ For instance, construal level theory predicts that details of experiences fade away faster than higher-level constructs and emotions fade away faster than cognitions.²³⁷ A related theory of how people evaluate personal events in their lives posits that people’s anticipations and memories of certain categories of events often are more positive than actual experiences of those events.²³⁸ This theory suggests three distinct processes to explain this phenomenon: (1) Rosy Prospection, a tendency “to anticipate events as more favorable and positive than” actual experiences; (2) Dampening, a tendency “to minimize the favorability or pleasure of events” as people experience them; and (3) Rosy Retrospection, a tendency to recollect and remember events people experience “more fondly and positively” than experienced.²³⁹

Older adults exhibit more temporal realism than do young and middle-aged adults in that, for older adults, retrospective and anticipatory life satisfaction ratings match actual levels of satisfaction.²⁴⁰ In other words, young and middle-aged adults exhibit more temporal affective illusion as defined by their prospective and retrospective life satisfaction ratings.²⁴¹ At all ages, temporal realism is associated with more adaptive current functioning than illusion,²⁴² when illusion is defined as inaccuracy. More traditional defini-

234. MILAN KUNDERA, *IMMORTALITY* 314 (Peter Kussi trans., Grove Press, Inc. 1st Am. ed. 1991) (1990).

235. DISNEY, <http://disneyside.disney parks.disney.go.com> (last visited Nov. 15, 2014).

236. See Norman, *supra* note 229, at 24–26 (explaining and summarizing this research).

237. See Yaacov Trope & Nira Liberman, *Temporal Construal*, 110 PSYCHOL. REV. 403, 405–09 (2003) (presenting details of this theory).

238. See generally Terence R. Mitchell & Leigh Thompson, *A Theory of Temporal Adjustments of the Evaluation of Events: Rosy Prospection & Rosy Retrospection*, 5 ADVANCES IN MANAGERIAL COGNITION AND ORGANIZATIONAL INFORMATION PROCESSING 85, 85–114 (1994) (developing this theory).

239. *Id.* at 85.

240. See Margie E. Lachman et al., *Realism and Illusion in Americans’ Temporal Views of Their Life Satisfaction: Age Differences in Reconstructing the Past and Anticipating the Future*, 19 PSYCHOL. SCI. 889, 890–93 (2008).

241. See *id.* at tbl. 1, fig. 1.

242. See *id.* at 893–96.

tions of illusion, however, are relative to some objective standard or how others perform.²⁴³

A common belief, at least among rock stars,²⁴⁴ is that getting old stinks. In an internet study of laypeople,²⁴⁵ both older and younger adults estimate declining happiness from ages thirty to seventy on average,²⁴⁶ despite self-reports of current happiness being higher for older participants than for younger participants.²⁴⁷ Kahneman believes that, when people think of the future, they do not usually think of lived experiences, but instead think of anticipated memories.²⁴⁸ He believes that people actually choose memories of experiences as opposed to actual experiences.²⁴⁹ He sums up his viewpoint nicely with a compelling metaphor about “remembering selves” tyrannically dragging along “experiencing selves” through experiences that “experiencing selves” do not want and have no voice in choosing.²⁵⁰ As psychologist Frederic Bartlett states, “[T]he past is being continually re-made, reconstructed in the interests of the present . . .”²⁵¹

iii. Vacations

People largely take vacations in service of their remembering selves. As comedian Dave Barry jokingly points out, “the human race is far too stupid to be deterred from tourism by a mere several million years of bad experiences, and today we’re traveling in larger numbers than ever.”²⁵² This lies at the heart of Kahneman’s thesis: anticipated memories of experiences—as op-

243. See generally Shelley Taylor et al., *Psychological Resources, Positive Illusions, and Health*, 55 AM. PSYCHOL. 99 (2000) (suggesting that even unrealistic optimism is a psychological resource that not only preserves mental health during life-threatening or traumatic events, but also protects physical health); see also Shelley Taylor et al., *Portrait of the Self-Enhancer: Well Adjusted and Well Liked or Maladjusted and Friendless?*, 84 J. PERSONALITY & SOC. PSYCHOL. 165 (2003) (reporting that self-enhancement positively correlates with multiple indicators of mental health and favorably impacts others).

244. THE WHO, *My Generation, on MY GENERATION* (MCA 2002) (1965) (“I hope I die before I get old . . .”).

245. Heather P. Lacey et al., *Hope I Die Before I Get Old: Mispredicting Happiness Across the Adult Lifespan*, 7 J. HAPPINESS STUD. 167 (2006).

246. See *id.* at 172, 174.

247. See *id.* at 171–72.

248. See Kahneman, *Experience vs. Memory*, *supra* note 11.

249. *Id.*

250. *Id.*

251. FREDERIC C. BARTLETT, *REMEMBERING: A STUDY IN EXPERIMENTAL AND SOCIAL PSYCHOLOGY* 309 (2d. ed., 1995).

252. DAVE BARRY, *DAVE BARRY’S ONLY TRAVEL GUIDE YOU’LL EVER NEED* 3–4 (1992).

posed to anticipated experiences themselves—motivate human behavior.²⁵³ In fact, not only do prospective reports of vacation enjoyment converge with retrospective ones, but predicted and remembered affect are also more positive than concurrent affect reported during vacations.²⁵⁴ For example, a comparison of these three affects regarding students' spring break vacations revealed that predicted and remembered affects are both more positive and negative than concurrently experienced affect.²⁵⁵ However, remembered affect best predicts students' desire to take similar vacations in the future.²⁵⁶

Incidental emotions may also matter, due to an emotion-congruency effect; vacations with adventurous appeal are evaluated more favorably if participants feel excited, while vacations with serene appeal are evaluated more favorably if participants feel peaceful.²⁵⁷ Such an effect is not observed, however, if participants realize their feelings are incidental; the effect is mediated by emotion's influence on participants' expectations that a vacation will deliver what it promises.²⁵⁸

Ultimately, most people want to enjoy pleasurable experiences and avoid disagreeable ones. Kahneman correctly observes that people base their anticipated experiences upon memories of similar experiences.²⁵⁹ But what if people have no such memories of similar experiences? In that case, it would not seem descriptively accurate to say that choices regarding possible actual experiences are motivated completely by anticipated memories, and that no part is played by anticipated actual experiences.

253. See generally Kahneman, *Experience vs. Memory*, *supra* note 11, at 388–90.

254. T. R. Mitchell et al., *Temporal Adjustments in the Evaluation of Events: The "Rosy" View*, 33 J. EXPERIMENTAL & SOC. PSYCHOL. 421 (1997) (presenting studies examining people's anticipation of, actual experiences in, and subsequent recollection of three vacations: a trip to Europe, a Thanksgiving vacation, and a three-week bicycle trip in California). But see Michael Ross & Qi Wang, *Why We Remember and What We Remember: Culture and Autobiographical Memory*, 5 PERSP. PSYCHOL. SCI. 401, 405 (2010) ("East Asians who retrospectively downplay their positive emotional experiences might revive their earlier enjoyment by revisiting past places that they remember with some fondness.").

255. Derrick Wirtz et al., *What to Do on Spring Break? The Role of Predicted, On-Line, and Remembered Experience in Future Choice*, 14 PSYCHOL. SCI. 520 (2003) (suggesting that even though on-line measures could approximate objective experience better than retrospective measures, retrospective measures can better predict choice behavior).

256. *Id.*

257. Hakkyun Kim et al., *Will This Trip Really Be Exciting? The Role of Incidental Emotions in Product Evaluation*, 36 J. CONSUMER RES. 983 (2010).

258. *Id.*

259. See generally Kahneman, *Experience vs. Memory*, *supra* note 11.

An intuition that some people may desire more than just anticipated memories is viscerally illustrated in *Total Recall*,²⁶⁰ a popular film based on Philip K. Dick's science-fiction novelette, *We Can Remember it for You Wholesale*.²⁶¹ In the film, characters debate about purchasing the services of Rekal Incorporated, a company that provides implanted false memories of ideal virtual vacations.²⁶²

Despite the expected and inevitable hassles of travel, many people prefer to actually experience a vacation, and anticipate having fond memories of it. Thoughts of bonding, shared experiences, and fond memories may also motivate choices regarding traveling companions and destinations. In other words, some people believe that sometimes, vacations can transform relationships with family, friends, and even people who previously were strangers.²⁶³ Furthermore, many people undertake certain experiences because they hope they will become different people, not just identical people with different memories. This motivation is especially true for such transcendental emotions as awe and wonder,²⁶⁴ which people often wish to share with family and friends.²⁶⁵ These observations illustrate that people care not only about living through certain experiences, but also about having incomplete, selective memories of those experiences which they can then relive.

To view incompleteness of memory as a bias presumes an unattainable normative benchmark of perfect recall,²⁶⁶ to which there are at least three responses. First, documentation of so-called biases does not evidence a "correlation with lower earnings, unhappiness, impaired health, inaccurate be-

260. *TOTAL RECALL* (TriStar Pictures 1990).

261. Philip K. Dick, *We Can Remember it for You Wholesale*, in *THE COLLECTED STORIES OF PHILIP K. DICK* 35 (2002).

262. *TOTAL RECALL*, *supra* note 260.

263. Rebecca Webber, *Big Moments*, *PSYCH. TODAY*, Sept. 1, 2010, at 63, 64–69 (describing transformative nature of anticipations, experiences, and memories of peak moments).

264. Dacher Keltner & Jonathan Haidt, *Approaching Awe, a Moral, Spiritual, and Aesthetic Emotion*, 17 *COGNITION & EMOTION* 297 (2003) (analyzing awe and such related states as admiration, elevation, and experiences of epiphany).

265. Jonathan Haidt, *Hive Psychology, Happiness, and Public Policy*, 37 *J. LEGAL STUD.* 133 (2008) (suggesting a focus on happy groups as being more than collections of happy individuals); *see also* Rajagopal Raghunathan & Kim Corfman, *Is Happiness Shared Doubled and Sadness Shared Halved?: Social Influence on Enjoyment of Hedonic Experiences*, 43 *J. MARKETING RES.* 386, 388–93 (2006) (reporting on a pair of experiments showing how exposure to other people's opinions affects people's enjoyment of shared experiences).

266. Nathan Berg, *Behavioral Economics*, in 2 *21ST CENTURY ECONOMICS: A REFERENCE HANDBOOK* 867 (Rhona C. Free ed., 2010) (utilizing "bias" label implies existence of a normative benchmark).

liefs, or shorter lives.”²⁶⁷ Second, related heuristics studies show that “less information, computation, and time can in fact improve accuracy [of recall].”²⁶⁸ Third, aggregate or social consequences of so-called biases can differ from individual consequences.²⁶⁹ All three of these observations imply that law can view—and have reasons to normatively treat—an individual’s memory differently than the individual does.

C. Hedonic Adaptation and Defective Affective Forecasting

“If you keep going over the past, you’re going to end up with a thousand pasts and no future.”²⁷⁰

It is evolutionarily advantageous for us to hedonically adapt to certain external conditions. Various empirical studies of hedonic adaptation show our attention is a scarce resource, so our emotions direct our attention to anything that causes us to feel emotional responses.²⁷¹ Similar to imperfect recall and incompleteness of memories, hedonic adaptation frees up people’s attention so they can focus it elsewhere when required for survival.²⁷² “Failure to adapt would unnecessarily sap limited brain resources needed to perceive new stimuli and, in the extreme case, bring about the extinction of the species.”²⁷³ Peter Medawar, 1960 Nobel Laureate in Physiology or Medicine,²⁷⁴ and his wife Jean explain “[i]n a sense, all evolution is adaptation.”²⁷⁵ Both hedonic adaptation and partially forgetting experiences permit

267. Nathan Berg & Gerd Gigerenzer, *As-If Behavioral Economics: Neoclassical Economics in Disguise?*, 18 HIST. ECON. IDEAS 133 (2010) (making this observation).

268. Gerd Gigerenzer & Henry Brighton, *Homo Heuristicus: Why Biased Minds Make Better Inferences*, 1 TRENDS IN COGNITIVE SCI. 107 (2009).

269. Nathan Berg & Gerd Gigerenzer, *Psychology Implies Paternalism? Bounded Rationality May Reduce the Rationale to Regulate Risk-Taking*, 28 SOC. CHOICE & WELFARE 337, 338–58 (2007) (demonstrating this formally in a theoretical model).

270. EL SECRETO DE SUS OJOS, *supra* note 16, at 6.

271. See, e.g., Shane Frederick & George Loewenstein, *Hedonic Adaptation*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 302 (Daniel Kahneman, Ed Diener, & Norbert Schwarz eds., 1999).

272. *Id.*

273. Krzysztof Kontek, *Two Kinds of Adaptation, Two Kinds of Relativity* 6 (Sept. 19, 2010) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1679447.

274. *Peter Medawar—Facts*, NOBEL MEDIA AB 2014 (Aug. 5, 2014), http://nobelprize.org/nobel_prizes/medicine/laureates/1960/medawar-bio.html.

275. P. B. MEDAWAR & J. S. MEDAWAR, *ARISTOTLE TO ZOOS: A PHILOSOPHICAL DICTIONARY OF BIOLOGY* 1 (1983).

us to move on in life.²⁷⁶ “Burying the past is therefore a prerequisite to experiencing the present and the future.”²⁷⁷

Scholars disagree on how knowledge of hedonic adaptation should affect the legal system. Bronsteen, Buccafusco, and Masur point out previously unrecognized benefits of lengthy delays in civil trials: plaintiffs are more likely to settle and are motivated to settle for less than if their lawsuits were to proceed faster.²⁷⁸ Swedloff criticizes their arguments concerning litigation’s impacts on plaintiffs’ adaptation and analyzes whether the judicial system should encourage slower post-adaptation settlements, concluding that data on hedonic adaptation may not yet be ready for “prime time” application to settlements of civil litigation.²⁷⁹ Other considerations imply that empirical hedonic adaptation findings are of limited relevance to analyzing tort plaintiffs’ motivations.²⁸⁰ Many other emotions besides happiness motivate litigation.²⁸¹ In fact, emotions in tort cases can be cultural evaluations,²⁸² for instance, tort plaintiffs’ fear²⁸³ of losing their litigation options.²⁸⁴ Empirical data concerning hedonic adaptation fails to undermine monetary damages and jury awards for noneconomic harms in tort cases.²⁸⁵

276. Kontek, *supra* note 273, at 6.

277. *Id.*

278. See generally John Bronsteen et al., *Hedonic Adaptation and the Settlement of Civil Lawsuits*, 108 COLUM. L. REV. 1516 (2008).

279. Rick Swedloff, *Accounting for Happiness in Civil Settlements*, 108 COLUM. L. REV. SIDEBAR 39, 44–45 (2008); see also Swedloff, *supra* note 84, at 804–06 (arguing that questions about the meaning of well-being and temporal differences in happiness raise important concerns about how relevant hedonic adaptation is to the law).

280. Peter H. Huang, *Emotional Adaptation and Lawsuit Settlements*, 108 COLUM. L. REV. SIDEBAR 50, 51–52 (2008).

281. E.g., Peter H. Huang & Ho-Mou Wu, *Emotional Responses in Litigation*, 12 INT’L REV. L. & ECON. 31, 31–42 (1998) (analyzing such other emotions in litigation as anger, disappointment, embarrassment, pride, and vengeance).

282. See Peter H. Huang, *Diverse Conceptions of Emotions in Risk Regulation*, 156 U. PA. L. REV. PENNUMBRA 435 (2008) (analyzing other conceptions of emotions). See generally Dan Kahan, *Two Conceptions of Emotion in Risk Regulation*, 156 U. PA. L. REV. 741, 748–52 (2008) (explaining how emotions can be cultural evaluations).

283. Huang, *Emotional Adaptation and Lawsuit Settlements*, *supra* note 280, at 51–52.

284. See also Joseph A. Grundfest & Peter H. Huang, *The Unexpected Value of Litigation: A Real Options Perspective*, 58 STAN. L. REV. 1267, 1275–80 (2006) (introducing and analyzing a real options model of litigation).

285. Rick Swedloff & Peter H. Huang, *Tort Damages and the New Science of Happiness*, 85 IND. L.J. 553, 594 (2010).

Critics of the hedonist approach also argue that there are limitations to the use of hedonic adaptation in forming public policy. Loewenstein and physician Peter Ubel believe hedonic adaptation research casts grave doubts upon enacting policy based just on self-reported happiness or experienced affect.²⁸⁶ Similarly, philosopher Bengt Brulde believes that hedonic adaptation demonstrates a danger to basing distributive strategies on happiness data.²⁸⁷ Philosopher Joseph Heath concurs, emphasizing that we should “not to get too carried away when sampling the happiness literature, particularly with respect to adaptation . . . [and] there must be more . . . than merely a concern with subjective well-being.”²⁸⁸

Some scholars suggest that any public policy should pass a common-sense test.²⁸⁹ Judgment and decision-making scholar Shane Frederick and Loewenstein suggest considering these three questions:

Assuming that future research provides a deeper understanding of hedonic adaptation, is it likely that such information would cause people to conduct their lives differently? Would they stop wearing seatbelts with the assurance that they would get used to being paralyzed? Would they exploit an embezzlement opportunity knowing that prison wouldn’t be all that bad in the long run? We suspect not.²⁹⁰

People can also disrupt hedonic adaptation by interrupting their experiences. Although people seem annoyed by commercials interrupting television programs, such interruptions actually make programs more enjoyable.²⁹¹ This effect is eliminated for people who are less likely to adapt and for programs that do not lead to adaptation.²⁹² This confirms a disruption of adaptation and identifies crucial boundaries of this effect.²⁹³ Similar, perhaps counterintuitive, phenomena occur across a variety of hedonic consumption

286. George Loewenstein & Peter A. Ubel, *Hedonic Adaptation and the Role of Decision and Experience Utility in Public Policy*, 92 J. PUB. ECON. 1795, 1799–1800 (2008) (noting that people make great sacrifices to avoid experiencing negative circumstances despite knowing they will adapt).

287. Bengt Brulde, *Happiness, Morality, and Politics*, 11 J. HAPPINESS STUD. 567, 582 (2010).

288. Joseph Heath, *Comment on Andreou*, ETHICS, PLACE, & ENV’T 23, 25 (2010).

289. Levav, *supra* note 61, at 335.

290. Frederick & Loewenstein, *supra* note 271, at 320.

291. E.g., Leif D. Nelson et al., *Enhancing the Television-Viewing Experience Through Commercial Interruptions*, 36 J. CONSUMER RES. 160 (2009) (presenting six studies demonstrating these findings are true, independent of commercial quality, the interruptions’ nature and even controlling for mere presence of commercials).

292. *Id.*

293. *Id.*

experiences ranging from sitting in a massage chair to listening to noises or songs. Even though people avoid breaks in pleasant experiences and choose breaks in unpleasant experiences, interruptions in a consumption experience can disrupt hedonic adaptation and intensify subsequent experiences, making pleasant experiences more enjoyable and unpleasant experiences more irritating.²⁹⁴

People are prone to underestimate how much and how quickly they and others can adapt hedonically.²⁹⁵ For example, healthy people underestimate hedonic adaptation because they do not consider how and why their emotions are likely to change over time following the onset of a disability or illness.²⁹⁶ People tend also to recall atypical instances of events; if unaware of this, they rely on such atypical instances to make affective forecasts and choices about future events.²⁹⁷ But accuracy in affective forecasting is more complex than mere overestimation of duration and intensity. When people opt out of a risky gamble and instead make a safe bet, they actually underestimate instead of overestimate their affective reactions.²⁹⁸

Overestimation of affective reactions to future choices and events—also known as impact bias—is partially explained by well-documented focusing illusions.²⁹⁹ Impact biases can be disrupted by cognitive tasks to reduce the overestimation of their affective reactions to future events and decisions.³⁰⁰ For some people, focusing on peripheral events and recognizing coping capacity may improve their affective forecasting.³⁰¹ In addition, people repeatedly focusing prior to an event can influence their subsequent happiness

294. Leif D. Nelson & Tom Meyvis, *Interrupted Consumption: Adaptation and the Disruption of Hedonic Experience*, 45 J. MKTG. RES. 654 (2008) (presenting six studies demonstrating these findings).

295. See generally DANIEL GILBERT, *STUMBLING ON HAPPINESS* (2007).

296. Peter Ubel et al., *Misimagining the Unimaginable: The Disability Paradox and Health Care Decision Making*, 24 HEALTH PSYCHOL. 57 (2005).

297. See generally Carey K. Morewedge et al., *The Least Likely of Times: How Remembering the Past Biases Forecasts of the Future*, 16 PSYCHOL. SCI. 626 (2005).

298. Eduardo B. Andrade & Leaf Van Boven, *Feelings Not Forgone: Underestimating Affective Reactions to What Does Not Happen*, 21 PSYCHOL. SCI. 706, 706–11 (2010).

299. See, e.g., Chris Guthrie & David Sally, *The Impact of the Impact Bias on Negotiation*, 87 MARQ. L. REV. 817, 821–28 (2004) (discussing implications of impact bias for negotiators).

300. Nick Sevdalis & Nigel Harvey, *Reducing the Impact Bias in Judgments of Post-Decisional Affect: Distraction or Task Interference?*, 4 JUDGMENT & DECISION MAKING 287, 288–95 (2009).

301. Michael Hoerger et al., *Cognitive Determinants of Affective Forecasting Errors*, 5 JUDGMENT & DECISION MAKING 365, 371 (2010).

ratings.³⁰² The repeated focusing effect and difficulty of de-biasing the studies implies possible difficulties for interpreting subjective well-being data.³⁰³

III. CHRONIC HEALTH OR STRESS EFFECTS

This part of the article identifies conditions under which society, via law, should care about people's experiences more than their memories. Although legal proceedings are themselves experiences that usually entail negative affect,³⁰⁴ legal proceedings also involve memories of experiences that led to such legal proceedings instead of those actual experiences themselves. Civil and criminal prosecutions rely upon testimony about recollections of experiences because lawsuits necessarily occur after whatever events led to them.³⁰⁵ Law as expressed in model codes, judicial opinions, statutory regulations, rules, subsidies, and taxes can focus upon people's experiences, memories, or both.

The law can and should consider people's memories when they hold meaning to people, especially if those memories impinge on people's abilities to live their lives. For example, a criminal defense involving post-traumatic stress disorder (PTSD)³⁰⁶ focuses upon persistent and frightening memories of a past experienced ordeal.³⁰⁷

Many activities that laws are designed to influence impact objective consequences and subjective experiences for not only those who choose and are intended targets of those activities, but also society at large. Such externalities, whether they are objective consequences upon or subjective experiences of third parties, may be just as important as direct effects. They might be even more crucial in terms of their expressive, public policy, signaling, or spillover effects.

When objective consequences and subjective memories of experiences differ in valence, law may care about objective consequences more than sub-

302. Paul Dolan & Robert Metcalfe, 'Oops . . . I Did It Again': *Repeated Focusing Effects in Reports of Happiness*, 31 J. ECON. PSYCHOL. 732, 733–35 (2010) (showing that previous exposure to an ex ante survey of happiness and its attendant focusing on an event may shape and influence ex post self-reported happiness).

303. *Id.* at 735–36.

304. Huang & Wu, *supra* note 281, at 34–36 (analyzing how anger impacts pre-trial bargaining).

305. See Laura Engelhardt, Comment, *The Problem with Eyewitness Testimony*, 1 Stan. J. Legal Stud. 25, 29 (1999).

306. See, e.g., KATE E. BLOCH & KEVIN C. McMUNIGAL, CRIMINAL LAW: A CONTEMPORARY APPROACH 571–72 (Erwin Chemerinsky et al. eds., 1st ed. 2005) (analyzing legal issues relating to PTSD).

307. *Id.*

jective memories of experiences for several reasons.³⁰⁸ First, objective consequences may vary less across people than subjective memories do because of heterogeneity in people's emotional reactions to experiences and their memories.³⁰⁹ Second, although experiences with positive objective consequences usually generate positive affective valence and correspondingly fond memories, experiences with negative objective consequences may nonetheless result in positive affect given enough time.³¹⁰ This is due to partial hedonic adaptation, which may yield positive memories due to incomplete and selective memories.

Third, if divergences between objective consequences and subjective memories of experiences are due to incomplete hedonic adaptation or imperfect memories, it would be perverse for the law to discourage recovery from negative affective experiences.³¹¹ It is normatively and socially desirable that people heal hedonically from and forget about unpleasantness from negatively affective experiences as much as they can. Simply because people hedonically adapt and forget about unpleasant experiences does not imply that the law should be correspondingly less concerned about those experiences.³¹²

Because experiences have a number of consequences, the law should care about information more than incomplete self-reports of subjectively remembered or experienced affect. This does not deny that the law can, does, and should care about self-reports of experienced and remembered affect; self-reports provide valuable information about what motivates the law.³¹³ However, not all of that information holds equal value. It is possible that a person's affective memories function as sufficient proxies of experienced affect from that person's viewpoint, but not from a societal point of view. Legal and social considerations including efficiency, equity, expectations, externalities, ethics, fairness, justice, morality, and public policy are all factors.³¹⁴

In addition, societies may pursue laws that care about experienced affect more than remembered affect to accomplish other particular goals. One possible set of legal and social objectives focus on expressive concerns,³¹⁵ such

308. Peter H. Huang, *Experiences Versus Memories: Should Law and Policy Care More about Your First Love or Your Memories of it?* 54–55 (Nov. 3 2011) (unpublished manuscript), available at <http://ssrn.com/abstract=1743025>.

309. *Id.* at 55.

310. *Id.*

311. *Id.*

312. *Id.*

313. *Id.*

314. Huang, *Experiences Versus Memories*, *supra* note 308, at 55–56.

315. See ELIZABETH S. ANDERSON, *VALUE IN ETHICS AND ECONOMICS* 17–43 (1995).

as providing aspirations for how individuals and societies can and should behave.³¹⁶

A. Dense and Long Commutes

The law should care about experiences more than memories if those repeated, chronic experiences adversely affect people's health or stress levels. For example, legal interventions to reduce negative affective commuting experiences can be justified by a paternalistic goal to reduce adverse cumulative, detrimental, long-term health consequences.³¹⁷ But, legal interventions can also be justified by a social but *not* paternalistic goal to the same end. Long, dense commutes result in negative affective contagion or spillover effects; societal medical costs of treating back problems, high blood pressure, mental anguish, neck strain, obesity, and physical stress. As law professor Claire Hill observes, "In most paternalistic interventions, there are externalities, and necessarily so."³¹⁸

How people experience urban commutes depends on how they perceive time and on various characteristics of their commutes, including duration, journey episodes, number of stages, travel environment, and expectations.³¹⁹ How commuters evaluate their experiences depends on those same characteristics.³²⁰ For instance, American workers with long commutes are more likely to self-report feeling fatigue, less enjoyment, high cholesterol, obesity, recurring back or neck pain, and worry.³²¹ One robust finding of empirical happiness research is that people having longer commuting times consistently self-report levels of lower subjective well-being.³²²

Psychologist Daniel Gilbert recommends that keeping one's commute short increases happiness, observing that people "can't adapt to commuting, because it's entirely unpredictable . . . [d]riving in traffic is a different kind

316. See generally Philip Harvey, *Aspirational Law*, 52 BUFF. L. REV. 101 (2004).

317. Claire A. Hill, *Anti-Anti-Anti-Paternalism*, 2 N.Y.U. J.L. & LIBERTY 444, 452 (2007).

318. *Id.*

319. Yuen-wah Li, *Evaluating the Urban Commute Experience: A Time Perception Approach*, 6 J. PUB. TRANSP. 41, 46–50, tbl. 1 (2003).

320. *Id.* at 50–55, tbl. 2.

321. See generally Steve Crabtree, *Wellbeing Lower Among Workers with Long Commutes*, GALLUP (Aug. 5, 2014), <http://www.gallup.com/poll/142142/well-being-lower-among-workers-long-commutes.aspx> (reporting details of this research).

322. See, e.g., Daniel Kahneman et al., *Would You Be Happier if You Were Richer? A Focusing Illusion*, 312 SCI. 1908, 1910, tbl. 4 (2006) (finding that commuting is correlated with lower self-reported happiness and higher stress levels).

of hell every day.”³²³ Interestingly, most people’s optimal commute times are not zero. One survey found that respondents prefer a minimum commute of twenty minutes to decompress and be free of home and work identities, engage in singing, experience being an adolescent again,³²⁴ and listen to talk radio, music, or audio books. People also use driving time to grieve in solitude.³²⁵ Indeed, there can be some real advantages to long commutes.³²⁶

1. Explaining Dense, Long Commutes

It is helpful to analyze how and why driving in traffic can be so miserable. Numerous factors make urban driving an unpleasant experience: accidents, buses, delays, lack of merging etiquette, lane closures, potholes, road construction, other drivers’ rudeness, speeding or very slow drivers, and stop-and-go traffic.³²⁷ All of these minor annoyances, repeated over time, can lead to chronic anger, anxiety, and stress,³²⁸ which can have detrimental behavioral, biological, physiological, and psychological correlates.³²⁹

There is an environmental mismatch in that human beings and their bodies evolved to handle infrequent short-term stresses such as running from predators, but are not equipped for the chronic, constant, and repeated stresses of long, dense commutes.³³⁰ For instance, emotions aroused during commuting likely also spill over into people’s home and work lives due to

323. Jonathan Clements, *Money and Happiness: Here’s Why You Won’t Laugh All the Way to the Bank*, WALL ST. J. (Aug. 5, 2014), <http://online.wsj.com/news/articles/SB115568141441336604> (quoting psychologist Daniel Gilbert).

324. TOM VANDERBILT, *TRAFFIC: WHY WE DRIVE THE WAY WE DO* 26 (1st ed. 2004).

325. *Id.* at 26; *see also* Paul C. Rosenblatt, *Grieving While Driving*, 28 DEATH STUD. 679, 680–85 (2004).

326. Kenneth Andrews, *Advantages of a Long Commute to Work*, CAREER PATH (Aug. 5, 2014), <http://www.careerpath360.com/index.php/advantages-of-a-long-commute-to-work-2-7951/>.

327. *Id.*

328. *See, e.g.*, REBECCA NERISON, *LAWYERS, ANGER AND ANXIETY: DEALING WITH THE STRESSES OF THE LEGAL PROFESSION* 1–13, 15–21, 42–49 (2010) (describing the physiology of stress and examining aspects of anger).

329. *See generally* ROBERT M. SAPOLSKY, *WHY ZEBRAS DON’T GET ULCERS* (3d ed., 2004) (explaining how the constant stresses of modern everyday life such as driving in traffic jams harms our cardiovascular, digestive, reproductive, and immune systems); *see also* RICHARD WILKINSON, *THE IMPACT OF INEQUALITY: HOW TO MAKE SICK SOCIETIES HEALTHIER* 272–81 (2005) (outlining briefly the biological effects of stress and how stress exerts a powerful effect on physiological health); RICHARD WILKINSON & KATE PICKETT, *THE SPIRIT LEVEL: WHY GREATER EQUALITY MAKES STRONGER SOCIETIES* 37–39, 86, 209 (2009) (summarizing stress-related sources, biology, and diseases).

330. *See generally* SAPOLSKY, *supra* note 329.

emotional contagion and incidental affect.³³¹ People rate commuting as not only unpleasant, but also less rewarding than almost all other activities.³³²

Drivers continuing to make dense, lengthy commutes, but simultaneously reporting increased stress and reduced life satisfaction, present a paradox.³³³ Why do these stressed out and unhappy individuals persist in dense, long commutes? Several theories center around personal satisfaction factors. One theory is that family members of commuters benefit, but such a hypothesis is not supported by empirical data.³³⁴ A second possible answer is that long commuters are compensated by homes or jobs they deem personally more attractive, but such a hypothesis also does not have empirical support.³³⁵ A third possible answer is that transactions costs limit job and residential mobility; this offers only a partial explanation at best.³³⁶

Other theories favor behavioral explanations. For instance, one premise is based upon people's defective affective forecasting.³³⁷ People's preferences are constructed by reference levels of commuting radius or time.³³⁸ For example, one study of people moving from one American city to another indicates that those from cities with high average commute times choose to commute more than average in their new location.³³⁹ This research thus explains people commuting not only too much, but also too little.³⁴⁰ Another possible answer is that people are weak-willed, which is also a partial explanation at best.³⁴¹

This article proposes that another possible reason for the commuting paradox is people's unsurprisingly incomplete memories of commuting. Albert Einstein said: "Any man who can drive safely while kissing a pretty girl

331. See generally Andrews, *supra* note 326.

332. White & Dolan, *supra* note 115, at 1002, 1005, 1007.

333. Alois Stutzer & Bruno S. Frey, *Stress that Doesn't Pay: The Commuting Paradox*, 110 SCANDINAVIAN J. ECON. 339, 341–55 (2008) (presenting detailed analysis of commuting costs in terms of physical and mental burdens and lower reported life satisfaction levels).

334. *Id.* at 355–57, tbl. 3.

335. *Id.* at 357–58, tbl. 4 (showing that long commuters would have less stress if they had less dense, shorter commutes while having the same homes or jobs as they have now).

336. *Id.* at 358–61, tbl. 5.

337. See generally GILBERT, *supra* note 295.

338. *Id.* at 361–62.

339. See generally Uri Simonsohn, *New-Yorkers Commute More Everywhere: Contrast Effects in the Field*, 88 REV. ECON. & STAT. 1, 1–9 (2006) (noting that the same is true of those with short commutes).

340. Stutzer & Frey, *supra* note 333, at 362.

341. *Id.*

is simply not giving the kiss the attention it deserves.”³⁴² Drivers have difficulties paying attention to traffic during commuting.³⁴³ Therefore, it seems intuitively and logically plausible that drivers also should have difficulty remembering details about traffic. These difficulties likely increase over time because details from any particular single commute fade into a sea of memories about commuting in general.

In addition, empirical happiness research indicates that happiness more strongly correlates to duration and frequency of positive feelings rather than those feelings’ intensity.³⁴⁴ Just as parents do not dwell upon small but frequent misery and stress of raising children,³⁴⁵ it seems plausible that drivers with long or unpleasant commutes do not remember every minor annoyance, frustration, indignity, and irritation they suffer on a regular basis.

Whether drivers remember such recurrent emotions from their long commutes is an open empirical question whose answer likely varies across people and commutes. But, well-documented phenomena of duration, neglect, and evaluation according to a peak-end rule should apply to memories of commuting experiences,³⁴⁶ and help explain why people find commuting home less unpleasant than commuting to work. People may adaptively neither dwell on remembering nor anticipating dense, long commutes if they have no effective choice about where they live and work.

2. Experiences Versus Memories of Commutes

Should laws care more about people’s actual unpleasant experiences or about their incomplete but less unpleasant memories of dense, lengthy commutes? Another way to think of this is to question whether incomplete commuting memories mean that people are not only individually, but also socially, mistaken in making such commutes. In other words, do people who make unpleasant, longer commutes impose negative externalities upon society? Long commutes have familiar and well-documented socially undesirable objective consequences, such as congestion and environmental damage. They also have less well-recognized socially undesirable subjective consequences, like negative affect contagion upon and spillover onto fellow commuters,

342. VANDERBILT, *supra* note 324, at 74 (analyzing research about difficulties of paying attention in traffic).

343. *Id.* at 74–89.

344. See, e.g., Ed Diener et al., *Happiness is the Frequency, Not the Intensity, of Positive Versus Negative Affect*, in *ASSESSING WELL-BEING: THE COLLECTED WORKS OF ED DIENER 3*: 213, 213–30 (Ed Diener ed., 2009); see also Ulrich Schimmack & Ed Diener, *Affect Intensity: Separating Intensity and Frequency in Repeatedly Measured Affect*, 73 J. PERSONALITY & SOC. PSYCHOL. 1313, 1315–28 (1997).

345. Nattavudh Powdthavee, *Think Having Children Will Make You Happier?*, 22 PSYCHOL. 308, 309–10 (2009).

346. See, e.g., Li, *supra* note 319, at 53–54 (explaining these applications).

commuters' households and their work colleagues when those groups have to deal with stressed-out commuters in bad moods.

Consider an analogy and the relevant differences between commuting and parenting. Powdthavee points out, "[r]aising children is probably the toughest and the duller job in the world."³⁴⁷ Commuting usually is neither as dull nor as tough as (mundane or difficult aspects of) parenting, but can involve similar types of loss of control, stress, and unpredictability. Powdthavee observes that it should be "no surprise to us that these negative experiences that come with parenthood will show up much more often in our subjective experiences, including happiness and life satisfaction, than activities that are, although rewarding, relatively rare."³⁴⁸ Similarly, it should be obvious that commuting's negative affect and experiences resonate louder in commuters' subjective experiences than any relatively rare positive affect and experiences, such as random acts of kindness or politeness in commuting.³⁴⁹ A key difference between commuting and parenting becomes apparent upon comparing the infrequent delights of commuting with the frequent and recurring—if not daily delights—of parenting.³⁵⁰

Shouldn't the wellbeing hit from a higher but less frequent quality experience with our children be larger than—or, at the very least, equal to—the small but more frequent misery that raising children can bring? . . . [W]e tend to believe that the rare but meaningful experiences—such as seeing our children smile for the first time or graduating from university or getting married—would give us massive increases in our happiness. And indeed they do, but these boosts in well-being, often to our surprise, tend not to last for very long.³⁵¹

He explains that a reason people are prone to focusing on illusions about positive experiences "lies in the nature of these experiences. How often do

347. Powdthavee, *supra* note 345, at 310.

348. *Id.*

349. See ED DIENER ET AL., WELL-BEING FOR PUBLIC POLICY 150–54 (Christopher Peterson ed., 2009).

350. S. Katherine Nelson et al., *The Pains and Pleasures of Parenting: When, Why, and How is Parenthood Associated with More or Less Well-Being?*, 140 PSYCHOL. BULL. 846 (2014) (presenting a model of parents' well-being that explains how and why parents experience more or less happiness than nonparents); S. Katherine Nelson et al., *In Defense of Parenthood: Children are Associated with More Joy Than Misery*, 24 PSYCHOL. SCI. 3 (2013) (reporting on three studies finding that parents report relatively higher levels of happiness, positive emotion, and meaning in life than do nonparents).

351. Powdthavee, *supra* note 345, at 309.

we think about these rare but meaningful experiences on a day-to-day basis if we are not prompted to think about them?”³⁵²

All of these observations about parenting also explain why experiences of negative affect from commuting outweigh any positive commuting experiences. However, people with dense, long commutes are presumably not just suffering from a focusing illusion about rare, meaningful positive affect from commuting. Instead, a more likely possibility is that people do not focus on the unpleasantness when they remember or anticipate such commutes. They are essentially undergoing an illusion entailing a failure to focus on the everyday negative affect due to long commutes.

Powdthavee asks, “[W]hat if we do not give in to this comfortable illusion? What if all of us decided one day—for the sake of our own personal happiness—not to have children any more [sic]? The chances are that the future [would] stop at our generation.”³⁵³ However, a similar question about commuting does not lead to such an apocalyptic outcome. Instead, if people focused more on how unpleasant long, dense commutes are, they might change their commuting behavior.³⁵⁴ If changing one’s commute, employment, or home is not practical, then an individual is fortunate to have a commuting illusion.

3. Possible Social Responses to Dense and Long Commutes

The commuting paradox may continue because people’s anticipations about and memories of commuting are more pleasant and selective in comparison to actual complete and unpleasant experiences of long, dense commutes. However, society should care about the cumulative, adverse health consequences due to commuting stress more than people’s incomplete affective memories and imperfect emotional anticipations associated with commuting. The law should care more about people’s repeated dense, long commuting experiences rather than people’s incomplete memories of them because such experiences have long-term deleterious health consequences and produce negative emotional and environmental externalities.³⁵⁵ A large body of empirical and experimental evidence demonstrates that long car and train commutes are correlated with a lower overall quality of life.³⁵⁶

352. *Id.* at 309.

353. *Id.* at 310.

354. DIENER ET AL., *supra* note 349, at 154.

355. *Id.* at 150–54.

356. *Id.* (analyzing, detailing, and surveying large number of studies demonstrating that long, dense commutes correlate to decreased attention, cardiovascular outcomes, frustration tolerance, health, life satisfaction, job satisfaction, job stability, mood, motivation, overall subjective well-being, proofreading performance, task persistence, and time spent on more enjoyable activities, in addition to increased cortisol, stress, and work absences).

But the fact that dense, long commutes are stressful, unpleasant, and unrewarding does not imply that all government policies and regulations are necessarily socially desirable or even good ideas based on sound economic and psychological foundations. For example, constructing more free lanes to relieve congestion is a bad idea because additional free lanes and roads only result in more traffic.³⁵⁷ In addition, even though searching for parking in most urban centers is often frustrating and stressful, providing more free parking spaces is an ill-advised policy that imposes high social costs and externalities upon communities and our environment.³⁵⁸ However, municipalities charging developers in-lieu fees and drivers for curb parking can also relieve parking congestion.³⁵⁹ Similarly, congestion pricing³⁶⁰ and provision of real-time congestion and/or routing information offer promise to relieve traffic congestion.³⁶¹

A number of government policies could reduce commuting, including appropriate design of public transportation; education about commuting's negative consequences on people's health and society at large, and urban planning to integrate business and residential neighborhoods via zoning regulations.³⁶² Other related proposals advocate increasing parks and green spaces near where people live and work, based on empirical and experimental studies demonstrating the well-being benefits of contact with nature.³⁶³ One comprehensive guide explains how land use lawyers, urban planners, and public officials can implement umbrella sustainable growth systems to improve the quality of life, revitalize neighborhoods, reduce air pollution, conserve land, and combat climate change.³⁶⁴

Urban economist Edward L. Glaeser argues that government policies such as building restrictions, oversupply of public infrastructure, zoning regulations, and subsidized automobile travel and home ownership have made

357. VANDERBILT, *supra* note 324, at 153–61 (analyzing problems caused by additional free roads).

358. *See generally* DONALD SHOUP, *THE HIGH COST OF FREE PARKING* 1–227 (2011) (providing a landmark analysis of problems caused by free parking).

359. *Id.* at 231–32 (analyzing possible solutions to problems due to providing free parking).

360. *See generally* William S. Vickrey, *Pricing in Urban and Suburban Transport*, 53 AM. ECON. REV. 452, 457–65 (1963) (proposing congestion pricing).

361. VANDERBILT, *supra* note 324, at 161–75 (analyzing possible solutions to problems of traffic congestion).

362. DIENER ET AL., *supra* note 349, at 154.

363. *Id.* at 154–57.

364. *See generally* ROBERT H. FREILICH ET AL., *FROM SPRAWL TO SUSTAINABILITY: SMART GROWTH, NEW URBANISM, GREEN DEVELOPMENT, AND RENEWABLE ENERGY* (2d ed. 2010) (defining these systems as a combination of green development, new urbanism, renewable energy, and smart growth).

city living less accessible than it should be.³⁶⁵ He advocates that government should discourage urban sprawl and commuting by promoting dense urbanization.³⁶⁶ Another theory suggests that cities in California, Nevada, Arizona, and Florida that have suffered economic decline due to the recent housing bust and recession can pursue smart shrinkage that encourages more green spaces, public transportation, and walking.³⁶⁷

Furthermore, private parties, such as employers, can provide complements or substitutes to government policies and regulations to improve people's well-being at work,³⁶⁸ including reducing dense and lengthy commutes. Enlightened employers can permit or actively encourage more telecommuting and should do so upon recognizing the economic, emotional, mental, and physical costs they incur on employees.³⁶⁹ In conjunction with governments, employers can subsidize carpooling and help transform public transportation into a positive experience by utilizing such design considerations as color, connection to place, economic revitalization, form, headway, lighting, operation, pace, route, scaling, seating, social opportunity, style, and transparency.³⁷⁰

B. Obesity

The World Health Organization defines being obese as having a measure of body fat based on height and weight, known as the Body Mass Index (BMI), of greater than thirty.³⁷¹ Most people would likely report that being obese is an unpleasant experience and their memories of being obese are negative.³⁷² A large part of such negative affect from both experiences and memories of being obese are due to guilt, shame, and stigma that are socially

365. See generally EDWARD L. GLAESER, TRIUMPH OF THE CITY: HOW OUR GREATEST INVENTION MAKES US RICHER, SMARTER, GREENER, HEALTHIER, AND HAPPIER (2011).

366. *Id.*

367. See JUSTIN B. HOLLANDER, SUNBURNT CITIES: THE GREAT RECESSION, DEPOPULATION AND URBAN PLANNING IN THE AMERICAN SUNBELT 117 (2011).

368. TOM RATH & JIM HARTER, WELLBEING: THE FIVE ESSENTIAL ELEMENTS 15–29, 187–94 (2010) (providing details and references concerning importance of people's well-being at work as compared to people's overall well-being).

369. Crabtree, *supra* note 321.

370. See generally DARRIN NORDAHL, MY KIND OF TRANSIT: RETHINKING PUBLIC TRANSPORTATION IN AMERICA 123–25 (2008) (analyzing past, present, and future of American public transportation).

371. *Health Topics Obesity*, WORLD HEALTH ORGANIZATION, <http://www.who.int/topics/obesity/en/> (last visited Sept. 18, 2014).

372. Alois Stutzer, *Limited Self-Control, Obesity and the Loss of Happiness*, 15 INST. STUD. LAB. [IZA] Discussion Paper No. 2925, 2007) (Ger.) (finding empirically that obesity decreases self-reported well-being of people who also self-report limited self-control).

associated with obesity.³⁷³ Even though people find neither experiences nor memories of being obese to be positive, people nonetheless often become obese despite a desire not to be so.³⁷⁴ Such unintended consequences often result from people over-engaging in experiences which usually lead to positive affect and memories, such as eating comfort food, and under-engaging in experiences which can produce short-term negative but long-term positive affect, such as moderate to vigorous physical exercise.³⁷⁵

There are many different explanations for what causes obesity and its recently increasing levels in the United States and many other developed countries.³⁷⁶ A recent alternative socio-economic model that explains obesity and its recent increase³⁷⁷ draws upon medical evidence that weight changes are not strictly determined by net calorie consumption, but instead by what foods people eat and how those foods influence such hormones as insulin and effect the hormonal balance.³⁷⁸ Attempts to change one's lifestyle involve behavioral, cognitive, emotional, financial, psychological, and time costs.³⁷⁹ An economic model, in which people who would like to modify their behavior face adjustment costs, mathematically proves that policy measures can raise individual welfare by focusing on: (1) reducing incidence of excessive consumption and leisure, and/or (2) facilitating behavioral change.³⁸⁰ Behavior-focused studies find that these activities are correlated with an increased probability of losing weight and keeping it off; adopting clear, modest goals;

373. See David S. Krantz et al., *Health Psychology*, 36 ANN. REV. PSYCHOL. 349, 368 ().

374. See generally *id.* at 368–69.

375. *Id.*

376. See, e.g., Sara N. Bleich et al., *Why is the Developed World Obese?*, 29 ANN. REV. PUB. HEALTH 273 (2008) (estimating relative contribution of increased caloric intake and reduced physical activity to obesity in developed countries); Eric A. Finkelstein, et al., *Economic Causes and Consequences of Obesity*, 26 ANN. REV. PUB. HEALTH 239 (2005) (examining underlying economic causes behind, economic consequences of, and role of government in combating obesity); Odelia Rosen, *The Economic Causes of Obesity*, 22 J. ECON. SURV. 617 (2008) (surveying empirical and theoretical literature about economic and non-economic causes of obesity).

377. John F. Tomer, *What Causes Obesity? And Why Has it Grown So Much?*, 54 CHALLENGE 22, 26–29 (2012).

378. See generally MARK HYMAN, *ULTRAMETABOLISM: THE SIMPLE PLAN FOR AUTOMATIC WEIGHT LOSS* (2006); GARY TAUBES, *WHY WE GET FAT: AND WHAT TO DO ABOUT IT* (2011); GARY TAUBES, *GOOD CALORIES, BAD CALORIES: FATS, CARBS, AND THE CONTROVERSIAL SCIENCE OF DIET AND HEALTH* (2008).

379. See, e.g., Krantz et al., *supra* note 373, at 373–74.

380. Heather Bednarek et al., *Gluttony and Sloth: Symptoms of Trouble or Signs of Bliss? A Theory of Choice in the Presence of Behavioral Adjustment Costs*, 5 CONTRIBUTIONS TO ECON. ANALYSIS & POL'Y 24–26 (2006).

focusing on lifelong habits; measuring initial weight and determining what rituals and routines are contributing to overeating and/or under-exercising; making small changes in behavior; measuring and recording one's body weight, calories eaten, and steps taken; and joining support groups.³⁸¹

This part of the article briefly considers three related, but distinct, correlates of being obese; namely too much unhealthy eating, too little physical exercise, and too much sedentary behavior, especially sitting time; and some possible legal responses. To help individuals change their behavior, mere disclosure or provision of information about biological, health, and stress effects of experiences is not enough; instead, law has to engage people's emotions to motivate them to want to change.³⁸²

1. Overeating and Unhealthy Eating

Humans evolved to anticipate and feel pleasure from experiences and memories such as eating and sex, which facilitate their survival and reproduction. However, overeating, unhealthy diets, and sex addiction are maladaptive. An obvious way to reduce overeating and poor nutrition is to make experiences and memories of overeating and unhealthy eating less pleasant. While this seems reasonable, Lowenstein and behavioral economist Ted O'Donoghue warn that a danger of trying to control overeating via negative affect is that people may fail to control their overeating and thus experience the negative emotions of guilt and shame.³⁸³ In some cases, people may develop neurotic attitudes about eating in addition to suffering adverse material objective consequences from overeating.³⁸⁴

An alternative approach to curb these bad behaviors is to transform the paradigm of "food as health" into "food as well-being." To enact this change, society must shift from emphasizing restraint and restrictions to encouraging a holistic and more positive understanding of how food can fit into a person's overall well-being.³⁸⁵ Cultural, environmental, and legal changes may help societies develop more positive emotional, physical, psychological, and social relationships with food.³⁸⁶

In addition, society can design policies that not only transform food-related experiences, but also influence memories of past food experiences.

381. David H. Freedman, *How to Fix the Obesity Crisis*, SCI. AM., Feb. 2011, at 40.

382. See generally CHIP HEATH & DAN HEATH, SWITCH: HOW TO CHANGE THINGS WHEN CHANGE IS HARD (2010); <http://heathbrothers.com/books/switch/> (last visited Sept. 22, 2014).

383. See generally George Loewenstein & Ted O'Donoghue, "We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation and the Law, 73 U. CHI. L. REV. 183 (2006).

384. See generally *id.*

385. Lauren G. Block et al., *From Nutrients to Nurturance: A Conceptual Introduction to Food Well-Being*, 30 J. PUB. POL'Y & MKTG. 5 (2011).

386. *Id.*

For example, a recent study of non-dieting females of unexceptional weight found that those who ate while watching television had less accurate memories of their food intake and ate more during a later, television-free meal.³⁸⁷ This research suggests that eating while watching television affects people's memories about how much they ate, causing them to eat more later on.³⁸⁸

People overeat for myriad reasons. People often eat more than they think because they eat mindlessly instead of mindfully.³⁸⁹ Thus, one legal and policy response to people overeating and eating unhealthily is to encourage mindful eating.³⁹⁰ People also eat when they are sad, to self-medicate, and when they are happy, to celebrate. A recent study found that both stress and emotional eating are related to people overestimating their aggregate food consumption.³⁹¹ Thus, another legal and policy response to this would be to foster non-emotional eating and to reduce stress in general.

Finally, laws should help children develop life-long, mindful, and healthy eating habits because people learn many eating practices early in life from their parents, siblings, and peers.³⁹² For example, the U.S. Department of Agriculture recently proposed a rule to raise nutrition standards of school meals by limiting calories, french fries, and sodium and offering more fruits and vegetables.³⁹³

C. Regular Physical Exercise

While most people understand that regular physical exercise has some health benefit, they might not know about the antidepressant and stress-reducing effects of physical exercise. There is a large and growing body of

387. Dolly Mittal et al., *Snacking While Watching TV Impairs Food Recall and Promotes Food Intake on a Later TV Free Test Meal*, 25 APPLIED COGNITIVE PSYCHOL. 871 (2011).

388. *Id.* at 876.

389. See generally BRIAN WANSINK, *MINDLESS EATING: WHY WE EAT MORE THAN WE THINK* (2006), available at <http://www.mindlesseating.org/>.

390. See, e.g., Jan Chozen Bays, *Mindful Eating: The French Paradox*, PSYCH. TODAY, <http://www.psychologytoday.com/blog/mindful-eating/200903/mindful-eating-the-french-paradox> (discussing eating less but enjoying it more) (last visited Aug. 6, 2014).

391. Justin D. Royal & Jaime L. Kurtz, *I Ate What?! The Effect of Stress and Dispositional Eating Style on Food Intake and Behavioral Awareness*, 49 PERSONALITY & INDIVIDUAL DIFFERENCES 565, 568 (2010) (presenting experimental details).

392. See, e.g., Jan Chozen Bays, *Mindful Eating: The French Paradox Part 2*, PSYCH. TODAY, <http://www.psychologytoday.com/blog/mindful-eating/201002/the-french-paradox-part-2> (describing teaching children mindful eating) (last visited Aug. 6, 2014).

393. Nutrition Standards in the National School Lunch and School Breakfast Programs, 76 Fed. Reg. 2494 (Jan. 13, 2011).

research that shows aerobic exercise not only improves attention, brain function, cognitive learning, and mood, but also reduces anxiety and stress.³⁹⁴ Even doing single bouts of resistance exercise (which unlike aerobic exercise does not increase oxygen use), such as push-ups, sit-ups, and weightlifting, can enhance people's episodic memory.³⁹⁵ People may offer many different reasons for not engaging in regular physical exercise activity, including lack of time, money, inconvenience, and negative affect from physical exertion. Yet, walking is a low-cost, usually convenient, and often pleasant form of exercise. People's style of walking affects their affective memories and moods.³⁹⁶ Societies could provide more public spaces, such as parks, tracks, and indoor facilities, where people could safely walk and do other types of regular physical exercise.

Technology has made exercise accessible in a whole new way. On popular video game consoles, such as the Nintendo Wii, PlayStation⁷⁴, or Xbox One, people can play physically active video games. For instance, exercise video games can transform regular physical exercise activity into a more pleasant and meaningful experience.³⁹⁷ Public and private health insurance plans could promote more regular physical exercise by subsidizing the purchase and, more importantly, but harder to monitor and verify, regular utilization of physically active video games, gym memberships, and other exercise equipment.

1. Sedentary Behavior and Sitting Time

Sedentary behavior is behavior that expends a very low amount of energy.³⁹⁸ Examples of sedentary behavior include lying down, sitting when driving, working on a computer, and watching television. Recent studies of-

394. See generally JOHN J. RATEY, SPARK: THE REVOLUTIONARY NEW SCIENCE OF EXERCISE AND THE BRAIN (2008); see also Austin, *supra* note 14, at 829–34 (discussing neuroscientific details).

395. Lisa Weinberg et al., *A Single Bout of Resistance Exercise Can Enhance Episodic Memory Performance*, 153 ACTA PSYCHOLOGICA 13 (2014).

396. Johannes Michalak et al., *How We Walk Affects What We Remember: Gait Modification through Biofeedback Change Negative Affective Bias*, 46 J. BEHAV. THERAPY & EXPERIMENTAL PSYCHIATRY 121 (2015); Elizabeth Armstrong Moore, *The Way You Walk Can Change Your Mood*, USA TODAY, Dec. 9, 2014, <http://www.usatoday.com/story/news/2014/12/09/way-you-walk-can-change-mood/20133681/> (last visited Dec. 9, 2014) (reporting on this study); Christie Nicholson, *Bouncy Gait Improves Mood*, SCI. AM., Dec. 8, 2014, <http://www.scientificamerican.com/podcast/episode/bouncy-gait-improves-mood/> (last visited Dec. 11, 2014) (same).

397. Jeremy M. Zoss, *Study: EA Sports Actives Is an Effective Workout*, JOYSTICK DIVISION, http://www.joystickdivision.com/2010/06/study_ea_sports_active_is_an_e.php (last visited Aug. 6, 2014).

398. Neville Owen et al., *Environmental Determinants of Physical Activity and Sedentary Behavior*, 28 EXERCISE & SPORT SCI. REV. 153 (2000).

fer epidemiological evidence that sitting time has harmful cardiovascular and metabolic effects,³⁹⁹ which are independent of whether people meet physical activity recommendations.⁴⁰⁰ In fact, an individual can meet current suggested levels of physical activity, but still be sedentary.⁴⁰¹ In other words, “sitting too much is not the same as lack of exercise and, as such, has its own unique metabolic consequences.”⁴⁰² Researchers proposed a term, inactivity physiology, to describe potential causal roles of sedentary behaviors in development of cardiovascular and metabolic diseases.⁴⁰³

A number of epidemiological studies conclude that sedentary time is correlated with cardiometabolic risk, obesity, and even some cancers.⁴⁰⁴ For example, an Australian longitudinal study found that each hour of daily television viewing,⁴⁰⁵ which is the predominant leisure-time sedentary behavior, is associated with an eleven percent increase in the risk of all-cause mortality independent of an individual’s age, gender, physical activity level, and waist circumference.⁴⁰⁶

399. Marc T. Hamilton et al., *Role of Low Energy Expenditure and Sitting in Obesity, Metabolic Syndrome, Type 2 Diabetes, and Cardiovascular Disease*, 56 DIABETES 2655 (2007).

400. Marc T. Hamilton et al., *Too Little Exercise and Too Much Sitting: Inactivity Physiology and the Need for New Recommendations on Sedentary Behavior*, 2 CURRENT CARDIOVASCULAR RISK REP. 292 (2008).

401. *Id.* at 293–94.

402. *Id.* at 294.

403. Marc T. Hamilton et al., *Exercise Physiology Versus Inactivity Physiology: An Essential Concept for Understanding Lipoprotein Lipase Regulation*, 32 EXERCISE & SPORT SCI. REV. 161 (2004).

404. *See generally* Mark Stephen Tremblay et al., *Physiological and Health Implications of a Sedentary Lifestyle*, 35 APPLIED PHYSIOLOGY, NUTRITION, & METABOLISM 725 (2010) (reviewing these studies).

405. *See generally* David W. Dunstan et al., *Television Viewing Time and Mortality: The Australian Diabetes, Obesity and Lifestyle Study (AusDiab)*, 121 CIRCULATION 384 (2010).

406. People that watch a lot of television also report less life satisfaction, more anxiety, and increased material aspirations. *See generally* Bruno S. Frey et al., *Does Watching TV Make Us Happy?*, 28 J. ECON. PSYCHOL. 283 (2007); BRUNO S. FREY, *HAPPINESS: A REVOLUTION IN ECONOMICS* 93–105 (2008); *see also* Luigino Bruni & Luca Stanca, *Income Aspirations, Television and Happiness: Evidence from the World Values Survey*, 59 KYKLOS 209 (2006). People also self-report watching television to be among the least pleasant, in terms of experienced negative affect, leisure activities. *But see* Erik Hurst, *Thoughts on “National Time Accounting: The Currency of Life”*, in *MEASURING THE SUBJECTIVE WELL-BEING OF NATIONS* 234, tbl. 8.1, 235–36 (Alan B. Krueger ed., 2009) (suggesting that it should be unsurprising that people sometimes report experiencing negative affect from watching television because people often watch television fully expecting the possibility of negative affect, as when

Another study found that the relationship between sitting time and mortality does not depend on physical activity levels.⁴⁰⁷ Even after controlling for age, physical activity levels, and smoking, people who sat the most were roughly fifty percent more likely to die during the follow-up period than people who sat the least.⁴⁰⁸ In fact, the relationship between sitting time and mortality was also independent of BMI.⁴⁰⁹ These findings suggest that all factors being equal—age, alcohol intake, body weight, gender, physical activity levels, and smoking—a person who sits more has a higher risk of death than a person who sits less.⁴¹⁰

Finally, a recent study of ethnically diverse American adults found that independent of exercise time, prolonged amounts of sedentary time is associated with negative health consequences, including bigger waists, higher blood pressure, higher triglyceride levels, increased levels of C-reactive protein (an inflammatory marker associated with increased risk of coronary heart disease and vascular mortality), and lower levels of good cholesterol.⁴¹¹ These findings suggest that to prevent chronic disease, law should not only promote regular physical exercise, but also focus on reducing sitting time, especially prolonged television viewing.

The composition of that sedentary time can also influence physical well-being.⁴¹² A study found that regardless of total sedentary time and total activity time, people who took more breaks while at work or watching television had lower BMI and waist circumference. Additionally, those who took more breaks enjoyed better metabolic health in terms of lower blood lipids and glucose tolerance.⁴¹³ It is worth emphasizing that people in this study took breaks that were brief (less than five minutes) and of low intensity (just standing or walking to a washroom).⁴¹⁴

watching a sporting event in support of a favorite team likely to lose, or precisely to experience negative emotions, such as from a sad or scary program).

407. Peter T. Katzmarzyk et al., *Sitting Time and Mortality from All Causes, Cardiovascular Disease, and Cancer*, 41 MED. & SCI. IN SPORTS & EXERCISE 998 (2009); see also *Are You Sitting Too Much?* (Dec. 18, 2014), <https://www.youtube.com/watch?v=uiKg6JfS658>.

408. *Id.* at 1002, tbl. 3.

409. *Id.* at 1001.

410. *Id.* at 1002.

411. See generally Genevieve N. Healy et al., *Sedentary Time and Cardio-Metabolic Biomarkers in US Adults: NHANES 2003–06*, 32 EURO. HEART J. 590 (2011).

412. See generally Genevieve N. Healy et al., *Breaks in Sedentary Time: Beneficial Associations with Metabolic Risk*, 31 DIABETES CARE 661 (2008).

413. *Id.*

414. See *id.* at 662.

There is also further supporting evidence that, independent of overall sedentary time, breaks in sedentary time are beneficially associated with the inflammatory marker C-reactive protein, fasting plasma glucose, and waist circumference.⁴¹⁵ This research shows how important it is to avoid prolonged uninterrupted periods of sedentary—mainly sitting time—and supports public health recommendations which encourage physical activity.⁴¹⁶ If people are aware of their posture, then public health recommendations about not being sedentary might be most effective if they utilize terminology focusing on posture, such as: “Be aware of your posture throughout the day: sit less, stand more!”⁴¹⁷ Even if people are unaware of their posture, there are practical take-aways from this research.

[E]ven small changes to a person’s activity levels (as little as standing up regularly) might help to lower cardiovascular risk. These changes can be readily incorporated into the person’s day-to-day life (including the work environment). Stand up, move more, more often, could be used as a slogan to help get this message across.⁴¹⁸

In short, in modern Western societies, people’s schools, commutes, and jobs all too often involve a lot of sitting time. There are a number of rationales for and challenges to schools promoting physical activity.⁴¹⁹ Developmental molecular biologist John Medina suggests having students walk one to two miles per hour on treadmills instead of sitting at desks in classrooms.⁴²⁰ Public schools could experiment with this concept by replacing classroom desks with treadmills. Medina also suggests that companies replace desks in office cubicles with treadmills and notes that Boeing’s vice president of leadership installed a treadmill in her office.⁴²¹ In fact, Dr. James

415. Healy et al., *supra* note 411 (noting data from a large, multi-ethnic, population-based representative sample).

416. See generally Russell R. Pate et al., *Physical Activity and Public Health: A Recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine*, 273 J. AM. MED. ASS’N 402 (1995).

417. Hamilton et al., *supra* note 400, at 296.

418. Alan Mozes, *Taking Short Breaks from Sitting May Help Waistline and Heart*, HEALTHDAY, Jan. 12, 2011, <http://consumer.healthday.com/fitness-information-14/misc-health-news-265/taking-short-breaks-from-sitting-may-help-waist-line-and-heart-648761.html> (interviewing Genevieve N. Healy).

419. Andrew P. Hills et al., *Supporting Public Health Priorities: Recommendations for Physical Education and Physical Activity Promotion in Schools*, PROGRESS IN CARDIOVASCULAR DISEASES (forthcoming 2014).

420. JOHN MEDINA, BRAIN RULES: 12 PRINCIPLES FOR SURVIVING AND THRIVING AT WORK, HOME, AND SCHOOL 25–26 (2008).

421. *Id.* at 26.

A. Levine of the Mayo Clinic created and designed a “Treadmill Desk” specifically for these purposes.⁴²²

D. Financial and Retirement Planning

Household management is an activity with one of the highest U-index levels, which measures the fraction of time that people spend experiencing unpleasant emotions.⁴²³ This empirical data reflects the reality that people find managing their households to be affectively stressful and painful. Law should care about household management having negative affect because people are likely to engage in poor financial and retirement planning behavior due to procrastination and rushing through household management to minimize the unpleasantness.

For instance, taxbrain.com, which promises to “make taxes less taxing,” suggests that society should strive to make financial and retirement planning less affectively painful.⁴²⁴ This goal can be accomplished by subsidizing financial advice and financial planning software, such as Economic Security Planner⁴²⁵ and Financial Engines.⁴²⁶ The law can help make financial and retirement decision-making more automatic, effortless, painless, and simple for individuals. Stanford tax law professor Joseph Bankman not only advocates utilizing technology to simplify personal income tax filing,⁴²⁷ he also co-authored a California bill to create ReadyReturn,⁴²⁸ which is a completed tax return prepared by the state.⁴²⁹

422. TREADMILL DESK GEEKS: ALL WALK, SOME TALK, <http://www.treadmill-desk.com/> (last visited Aug. 6, 2014); *see also* NBC Today Show: Desk Workout: Treadmills at the Office (June 24, 2009), <http://www.youtube.com/watch?v=wbMTrboKbwU>.

423. Alan B. Krueger et al., *National Time Accounting: The Currency of Life*, MEASURING THE SUBJECTIVE WELL-BEING OF NATIONS: NATIONAL ACCOUNTS OF TIME USE AND WELL-BEING 9, 44, 46–47, tbls. 1.8 & 1.9 (Alan B. Krueger ed., 2009).

424. *We're Helping to Make Paying Uncle Sam Less Taxing*, (Sept. 21, 2014, 8:30 PM), TAXBRAIN.COM, <https://tb10.taxbrain.com/whytaxbrain.asp>.

425. *See generally* LAURENCE J. KOTLIKOFF & SCOTT BURNS, SPEND 'TIL THE END: THE REVOLUTIONARY GUIDE TO RAISING YOUR LIVING STANDARD TODAY AND WHEN YOU RETIRE (2008).

426. *See generally* CHRISTOPHER L. JONES, THE INTELLIGENT PORTFOLIO: PRACTICAL WISDOM ON PERSONAL INVESTING FROM FINANCIAL ENGINES (2008).

427. *See generally* Joseph Bankman, *Using Technology to Simplify Individual Tax Filing*, 61 NAT'L TAX J. 773 (2008).

428. Ready Return, <http://www.ftb.ca.gov/readyReturn/> (last visited Nov. 16, 2014).

429. *In California, the State Does Your Taxes*, MARKETPLACE MONEY (Apr. 9, 2010), <http://marketplace.publicradio.org/display/web/2010/04/09/mm-california-state-taxes> (transcript available).

IV. CONCLUSION

"There are those who look at things the way they are, and ask why . . . I dream of things that never were, and ask why not."⁴³⁰In conclusion, reconsider the question this article poses about whether the law should care more about experiencing selves or remembering selves. People typically care more about memories than experiences because they can only directly access memories, which are incomplete and selective versions of experiences. In reminiscing, people effectively can indirectly access past experiences via current memories. Memories are thus like imperfect and self-edited copies of experiences.⁴³¹

People often romanticize memories compared with actual experiences. This romanticism, combined with having memories that are rosier-colored than experiences, implies that people will not only care more about memories than experiences, but also that people will think more positively about memories than experiences. Because people base litigation decisions and policy lobbying efforts upon memories instead of experiences, law generally cares more about memories than experiences.

This article answers that question as follows: the law should care more about experiencing selves than remembering selves if and when experiences result in chronic health or stress consequences that either (1) society cares about more than people do for public policy reasons or (2) people also care about, but are unaware of, do not remember, or are unable to act upon (due to self-control problems).

In general, experiencing selves and remembering selves are both important and therefore should matter to law. For example, parents can and should care about not only their children's childhood experiences, but also about their children's memories as they age. However, there are many activities where the law may choose to favor people's memories of experiences over their actual experiences, such as being married, being a parent, owning a home, and suburban living. Differences between how people experience and remember home ownership,⁴³² marriage,⁴³³ parenting,⁴³⁴ and suburban life⁴³⁵

430. This quote is attributed to Robert F. Kennedy in his brother Edward's eulogy speech as: "Some men see things as they are and say why? I dream things that never were and say why not?" Robert Kennedy said that he was quoting George Bernard Shaw when he said this, but Robert Kennedy is often believed to have originated this quote, which actually paraphrases this line "You see things; and you say, 'Why?' But I dream things that never were; and I say, 'Why not?'" Edward Kennedy, *Eulogy for Robert F. Kennedy* (June 8, 1968), (transcript available at www.americanrhetoric.com); see also GEORGE BERNARD SHAW, *BACK TO METHUSELAH: A METABIOLOGICAL PENTATEUCH* 67 (1988) (1921).

431. CERTIFIED COPY (COPIE CONFORME) (IFC Films 2011) (raising the question of whether a copy of something can ever be just as good as the original thing).

432. See generally Luis Diaz-Serrano, *Disentangling the Housing Satisfaction Puzzle: Does Homeownership Really Matter?*, 30 J. ECON. PSYCHOL. 745, 751-55

raise positive questions about whether people care more about such experiences or memories of them. These differences between people's experiences and memories also raise normative questions about whether the law should privilege people's incomplete memories of such experiences.

In addition, questions arise about whether the law should care about, and deal with, empirical data indicating that although people accurately forecast affective valence of their experiences, people are systematically inaccurate in overestimating not only duration and intensity of affect,⁴³⁶ but also the importance of comparative value.⁴³⁷

Albert Einstein once said, "[t]he only reason for time is so that everything doesn't happen at once."⁴³⁸ William James wisely quipped that if people were to have complete recall, then, "It would take as long for us to recall a space of time as it took the original time to elapse, and we should never get ahead with our thinking."⁴³⁹ A consequence of time is that any experience has temporal antecedents in terms of anticipations and anticipatory emotions and temporal successors in terms of memories and emotional reactions to memories.

Any experience is just part of how that experience affects our lives due to impacts of expectations before an experience and recollections after it. A

(2009) (providing empirical data indicating that former renters experience sizeable gains in housing satisfaction upon becoming homeowners).

433. Clare Huntington, *Happy Families? Translating Positive Psychology into Family Law*, 16 VA. J. SOC. POL'Y & L. 385, 387–92, 395–403 (2009) (analyzing family law implications of empirical research demonstrating that close interpersonal relationships are significantly correlated with subjective well-being).

434. *Id.* at 403–10 (analyzing implications of positive psychology for laws regarding parenting).

435. Nansook Park & Christopher Peterson, *Does it Matter Where We Live? The Urban Psychology of Character Strengths*, 65 AM. PSYCH. 535, 538–45, fig. 1 (2010) (providing empirical data indicating how residents in 50 largest U.S. cities differ in average scores of emotional and interpersonal character strengths versus intellectual and self-oriented character strengths).

436. Blumenthal, *supra* note 169.

437. Carey K. Morewedge et al., *Consuming Experience: Why Affective Forecasters Overestimate Comparative Value*, 46 J. EXP. SOC. PSYCHOL. 986, 987–91 (2010) (indicating that people overestimate how important comparative value is when they make affective forecasts because (1) people do not realize how much comparison requires cognitive resources; (2) experiences consume more cognitive resources, such as people's attention, than forecasts do; and (3) any particular experience diminishes people's ability to compare that experience to its alternatives).

438. THE UNREAL UNIVERSE: PERCEPTION, PHYSICS, AND PHILOSOPHY, <http://theunrealuniverse.com/space-and-time> (last visited Sept. 24, 2014).

439. JAMES, *supra* note 5, at 680.

temporal answer to whether people care more about experiences or memories is that people care more about experiences when they experience them and more about memories when they remember them. A temporal difference in what people care more about could be seen as a focusing illusion: people focus on experiences now and memories later. But is this really an illusion or just a temporally appropriate difference in what people can, do, and should focus their attention upon?

Many people are not often present in moments of their experiences because they are thinking about or having feelings about future or past experiences. Behavioral awareness is related to mindfulness, which can be defined simply as a non-judgmental and present-centered attention to one's emotions and thoughts relating to ongoing life events. Psychological research finds that increased mindfulness is associated with more positive emotions, mood regulation expectancies, and self-acceptance.⁴⁴⁰ These and other self-regulatory benefits of mindfulness that foster academic success and prosocial behavior support conducting additional research into teaching mindfulness in American public education.⁴⁴¹

Learning to be mindfully aware of experiences as they unfold is a skill that people can develop and practice through mindfulness meditation.⁴⁴² Leonard Riskin, a pioneer in advocating mindfulness meditation for the legal profession, explains how it can help law students, lawyers, and clients to resolve legal conflicts and disputes.⁴⁴³ Mindfulness and meditation also reduce stress, improve cognitive performance, strengthen immune function, and provide health, neurological, and psychological benefits.⁴⁴⁴ Recent neuroscience research finds that mindfulness and meditation alter people's neural function and brain structure in ways that benefit people's bodies and

440. Sherlyn S. Jimenez et al., *A Mindfulness Model of Affect Regulation and Depressive Symptoms: Positive Emotions, Mood Regulation Expectancies, and Self-Acceptance as Regulatory Mechanisms*, 49 PERSONALITY & INDIVIDUAL DIFFERENCES 645, 646–49 (2010) (presenting details of this cross-sectional research).

441. Mind and Life Education Network, *Contemplative Practices and Mental Training: Prospects for American Education*, 6 CHILD DEV. PERSP. 146 (2012).

442. Huang, *Happiness Studies and Legal Policy*, *supra* note 15, at 420–22 (analyzing how and why legal policy can foster mindfulness).

443. See generally Leonard L. Riskin, *The Contemplative Lawyer: On the Potential Contributions of Mindfulness Meditation to Law Students and Lawyers and Their Clients*, 7 HARV. NEGOT. L. REV. 1, 1–66 (2002), available at <http://westallen.typepad.com/idealawg/files/contlawhnlrpdfriskin.pdf> (explaining how mindfulness meditation can be helpful in alternative dispute resolution and law).

444. Austin, *supra* note 14, at 838–43 (discussing details).

minds.⁴⁴⁵ Practicing mindfulness can provide the awareness for lawyers to improve their decision making and the space to exercise their options to engage in ethical and professional behavior.⁴⁴⁶

Observing one's own current internal state, a facet of mindfulness, is associated with more restrained affective forecasts in addition to reduced susceptibility to impact bias.⁴⁴⁷ Encouraging mindfulness can thus help counteract a common tendency people have to favor their inaccurate affective forecasts and idiosyncratic emotional memories over their actual experiences in making decisions. Improving people's ability to better observe current experiences helps develop the understanding that emotions, both positive and negative, are necessarily ephemeral and passing reactions that will be counterbalanced by future life events.

Third parties can also pursue activities to make people's negative memories less psychologically harmful. For example, people who receive more positive feedback about negative life experiences report feeling calmer about such experiences in comparison to a control group.⁴⁴⁸ Helping people view and think about negative events less negatively can lead people to remember such events more positively; in other words, there could be psychological benefits to looking on the bright side.⁴⁴⁹

In conclusion, strong normative reasons that support law caring more about people's experiences than memories include chronic health or stress effects from repeating certain experiences. In addition, law can alter how individuals experience their lives by facilitating and supporting mindfulness. Finally, law can directly alter how people remember their experiences. Important open questions are whether people's experiences or memories are more malleable and whether law can more easily and effectively alter people's experiences or their memories.

445. Matthieu Ricard et al., *Mind of the Meditator*, SCI. AM., Nov. 2014, at 39 (providing details); Richard J. Davidson, William James and Vilas Professor of Psychology and Psychiatry, Director of the Center for Investigating Healthy Minds at the Waisman Center, University of Wisconsin-Madison, Well-Being is a Skill, Community Lecture at the University of Colorado Boulder (Dec. 9, 2014), <http://www.cucrest.com/events-source/davidson>.

446. Peter H. Huang, *How Improving Decision-Making and Mindfulness Can Improve Legal Ethics and Professionalism*, 21 J.L. BUS. & ETHICS 35, 68 (2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474448.

447. Amber S. Emanuel et al., *The Role of Mindfulness Facets in Affective Forecasting*, 49 PERSONALITY & INDIVIDUAL DIFFERENCES 815, 816–18 (2010) (testing and confirming prediction that facets of mindfulness decrease impact bias in affective forecasting).

448. Melanie K. T. Takarangi & Deryn Strange, *Emotional Impact Feedback Changes How We Remember Negative Autobiographical Experiences*, 57 EXPERIMENTAL PSYCHOL. 354, 357 tbl. 2 (2010).

449. *Id.* at 358.

As a way to make more memorable and summarize this article's thesis, contemplate these five questions. How did you predict you would feel before reading this article? How did you feel as you read this article? How do you now remember feeling as you read it? What do you predict you will feel if you read this article again or other similar ones in the future? How can you improve the experiences and memories of reading this article?

