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Welfare as Happiness

JOHN BRONSTEEN, CHRISTOPHER BUCCAFUSCO, & JONATHAN S. MASUR*

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INTRODUCTION

When people write laws, what do they hope to accomplish? One view is that laws are written to drive people toward moral behavior or to embody an objective ideal of what is right. Whether or not those claims have merit, most would agree that another objective—making people’s lives better—is also, at minimum, an important goal of law. Improving the quality of life might not be the only thing that matters, but such improvement is desirable. Indeed, improving people’s lives is the explicit focus of much of the policymaking and regulatory work done by our government.

But what constitutes improvement? What is quality of life, and how can it be measured? We have used insights from the new field of hedonic psychology to analyze central questions in civil and criminal justice,¹ and we now apply those insights to a broader inquiry: how can the law improve human welfare?

For the past hundred years, the dominant account has been that the way to improve someone’s life is to make her more able to get what she wants.² This “preference satisfaction” approach, which is most closely associated with economics but also enjoys preeminence in both law and philosophy, is “[a]s of now, the theory to beat.”³ Additionally, in the past few decades, rival objectivist accounts have gained widespread attention.⁴ These objective approaches tend to conceive of well-being as fulfilling the criteria of an objective list of rights, freedoms, activities, and qualities, the contents of which can be widely agreed upon.⁵

In this Article, we articulate and defend a conception of well-being or quality of life that differs from each of those leading accounts.⁶ Following Jeremy

1. John Bronsteen, Christopher Buccafusco & Jonathan Masur, *Happiness and Punishment*, 76 U. CHI. L. REV. 1037 (2009) [hereinafter Bronsteen, Buccafusco & Masur, *Happiness and Punishment*]; John Bronsteen, Christopher Buccafusco & Jonathan S. Masur, *Hedonic Adaptation and the Settlement of Civil Lawsuits*, 109 COLUM. L. REV. 1516 (2008) [hereinafter Bronsteen, Buccafusco & Masur, *Adaptation and Settlement*]. For a brief list of related works, see Eric A. Posner & Cass R. Sunstein, *Introduction to the Conference on Law and Happiness*, 37 J. LEGAL STUD. S1, S2 & n.1 (2008).

2. E.g., DANIEL M. HAYBRON, *THE PURSUIT OF UNHAPPINESS: THE ELUSIVE PSYCHOLOGY OF WELL-BEING* 34 (2008) (“The dominant account among economists and philosophers over the last century or so . . . identifies well-being with the satisfaction of the individual’s desires.”). The preeminence of this philosophical conception of welfare may well be responsible, at least in part, for the analogous preeminence of Gross Domestic Product per capita as a nation’s measure of its citizens’ quality of life.

3. *Id.*

4. *Id.* at 35 (noting the rise of objectivist theories); see also PHILIPPA FOOT, *NATURAL GOODNESS* (2001); JAMES GRIFFIN, *WELL-BEING: ITS MEANING, MEASUREMENT AND MORAL IMPORTANCE*, ch. III (1986) (describing these theories); AMARTYA SEN, *COMMODITIES AND CAPABILITIES* (Oxford Univ. Press 1999) (1985); Daphna Lewinsohn-Zamir, *The Objectivity of Well-Being and the Objectives of Property Law*, 78 N.Y.U. L. REV. 1669 (2003); Lawrence B. Solum, *Natural Justice*, 51 AM. J. JURIS. 65 (2006); Lawrence B. Solum, *Virtue Jurisprudence: A Virtue-Centered Theory of Judging*, 34 METAPHILOSOPHY 178 (2003).

5. HAYBRON, *supra* note 2, at 35–36 (identifying “nature-fulfillment” as the common feature of eudaimonistic accounts of well-being, as contrasted with “list theories”); see also *infra* notes 84–85 and accompanying text.

6. We use the words well-being, welfare, and utility interchangeably as labels for that which is good for a person—that which makes her life better. Our argument is that happiness (defined as positive

Bentham, we argue that it is plausible to conceive of well-being based on happiness or positive affect—feeling good—rather than preference satisfaction or objective fulfillment.⁷ On this account, *a person's well-being is the aggregate of how she feels throughout her life*. The measure of welfare for a period of any duration, from a couple of minutes to an entire lifetime, is the aggregate of a person's moment-by-moment experiences of positive and negative feeling. We argue that this approach plausibly captures what people intuitively understand as well-being, and that it can withstand the most important criticisms offered by competing accounts.

The hedonic conception of welfare holds some advantages over alternative theories. Preference satisfaction is plagued by the fact that people make mistakes, often preferring and choosing things that fail to make them happy. Because well-being is evidently not increased by such mistakes, sophisticated preference theorists “launder” out a large set of people's actual preferences, excluding them by fiat from what counts as welfare. In order to arrive at a credible account, preferences must be laundered until the only ones that remain are those that actually make people happy. Rather than concocting elaborate ways to reach this result, a theory could simply conceive of well-being as happiness itself rather than as preference satisfaction.

As for objective theories, they are in tension with the widely held view that well-being is subjective. That is, a person's life is going well for her if *she* is happy, regardless of whether her life fulfills a set of criteria that others have deemed important. This intuition is contradicted by the conceptions of welfare that incorporate objective components, whereas the hedonic theory meshes perfectly with the intuition.⁸ Moreover, the hedonic approach accords also with the intuition that someone's well-being can be influenced only by things that affect the person's actual experience of life. Objective-list theories and nature-fulfillment accounts typically cannot make this claim.

Our objectives in this Article are modest. For decades, scholars have rejected the hedonic conception of welfare due to a limited set of counter-arguments, most notably Robert Nozick's “experience machine.” We seek only to demonstrate that hedonism is in fact a plausible account of welfare, and that the hedonic account is not as vulnerable to these standard attacks as scholars have long believed.

mental states, or subjectively feeling good) constitutes that thing (well-being, welfare, utility, or that which is good for a person). When we describe happiness as the sum of an individual's “feelings,” we mean it as a shorthand for feelings, emotions, and thoughts—all of an individual's emotional and cognitive experiences.

7. We defend an account similar to Unger's “value phenomenalism.” See P.K. UNGER, IDENTITY, CONSCIOUSNESS, AND VALUE 295–337 (1990); see also Y.S. BERKOVSKI, Welfare and Illusion 5 (Feb. 21, 2010) (unpublished manuscript, on file with the authors). It is worth noting that we defend a Benthamite concept of hedonism, rather than a Millian one, because we do not ascribe to Mill's classification of higher and lower pleasures. *E.g.*, J.S. MILL, UTILITARIANISM, ch. II para. 5 (1906).

8. *Cf.* L.W. SUMNER, WELFARE, HAPPINESS, AND ETHICS 10 (1996) (describing the process of reasoning about welfare in these terms).

Despite what we argue is the intuitive appeal of the hedonic approach, it has not yet gained broad acceptance. Part of the explanation lies with these philosophical counter-arguments, which we engage below. Another part of the explanation may be that positive and negative feelings are thought to be invisible, inaccessible, and unmeasurable.⁹ Policymakers who aim to improve lives must focus on something tangible and easily observed. Nature fulfillment and especially preference satisfaction fit the bill because both focus on external activity: the things people do and the choices they make. Happiness, by contrast, is internal—how can we know how a person feels?

This concern about measuring happiness has been addressed by recent groundbreaking research in the fields of psychology and neurobiology, pioneered by Nobel laureate Daniel Kahneman and others. The research provides a sophisticated means of measuring and analyzing people's positive and negative feelings. We have previously explored the implications of this research for both criminal and civil law,¹⁰ and we now use it as a means of defining and pursuing one of law's central goals.

This examination of competing versions of welfare is in service of a concrete goal. If subjective mental states plausibly constitute well-being, then law and public policy should consider turning their attention in that direction insofar as they aim to improve people's lives. Economists, primarily through the application of cost-benefit analysis (CBA), have heavily influenced law and policy to increase people's capacity to satisfy their preferences. Yet research from behavioral economics and hedonic psychology has shown that making people wealthier or giving them what they want are only weak proxies for their experienced well-being. Instead, law and policy should focus on helping people achieve those things that will actually improve their welfare. We will illustrate how the new research makes this objective possible.

To that end, we introduce a new, subjectively oriented decision tool—well-being analysis (WBA). Like its sibling CBA, WBA compares the costs and benefits associated with enacting a law or policy. But while CBA requires monetizing costs and benefits to make them commensurable, WBA simply considers their direct effects on reported well-being. As we illustrate below, WBA possesses two advantages over CBA: it relies on actual reporting of true life experiences, rather than hypothetical questions; and it does not require difficult wealth-to-welfare translations. The science of WBA is very young, but

9. See *infra* section I.E.

10. See Bronsteen, Buccafusco & Masur, *Adaptation and Settlement*, *supra* note 1; Bronsteen, Buccafusco & Masur, *Happiness and Punishment*, *supra* note 1. Others have done important work in this area as well. See Samuel R. Bagenstos & Margo Schlanger, *Hedonic Damages, Hedonic Adaptation, and Disability*, 60 *VAND. L. REV.* 745 (2007); Jeremy A. Blumenthal, *Law and the Emotions: The Problems of Affective Forecasting*, 80 *IND. L.J.* 155 (2005); Scott A. Moss & Peter H. Huang, *How the New Economics Can Improve Discrimination Law, and How Economics Can Survive the Demise of the 'Rational Actor.'* *WM. & MARY L. REV.* (forthcoming 2010), available at http://papers.ssrn.com/abstract_id=1368493; Cass R. Sunstein, *Illusory Losses*, 37 *J. LEG. STUD.* S157 (2008).

we believe that it holds significant promise as a mechanism for improving the quality of government decision making.

Crucially, WBA is valuable even if our arguments regarding the nature of well-being are wrong. All significant accounts of well-being—including preference satisfaction, objective list, capabilities-based, and nature fulfillment—deem moment-by-moment happiness to be at least *one aspect* of well-being.¹¹ Even if such happiness were not the only aspect of well-being, legal policy would be concerned with measuring and increasing it as a part of improving the quality of life. By introducing well-being analysis as a means of measuring and analyzing this aspect of welfare,¹² we contribute to law's capacity to make people's lives better on any account of what "better" means.

In Part I, we explain our view of well-being. We do not argue that well-being is the only thing of value or that it should trump other values. We argue only that, to the extent the law aims to increase well-being, that goal is plausibly achieved by (that is, it equates with) increasing happiness. Happiness, in turn, is how someone feels throughout the aggregated moments of her life. We conclude Part I by discussing how to measure this aggregation of moment-by-moment feeling.

In Part II, we contrast our hedonic account of well-being with capabilities-based, objective list, and nature-fulfillment theories. In Part III, we contrast our account with the preference-satisfaction approach—in particular, a refined version of this approach that we take to be the most plausible and persuasive example of it.

In Part IV, we explain how governments that currently use the economic tool of cost-benefit analysis could instead perform well-being analysis as easily or effectively, and how well-being analysis would increase the ability of those governments to improve human well-being.

To the extent that our society aims to make human life better, it should focus on making people happier. This Article argues for that position and sets out a preliminary blueprint for pursuing it.

I. A HAPPINESS-BASED APPROACH TO WELL-BEING

Part I lays out our theory that well-being is plausibly understood as the aggregation of a person's moment-by-moment feelings throughout her life. It also discusses preliminarily the means of measuring such aggregated feelings. These measurements will form the basis for well-being analysis, the tool we propose in Part IV for enabling legal policy to be informed by its effects on

11. See Mark Kelman, *Hedonic Psychology and the Ambiguities of "Welfare,"* 33 PHIL. & PUB. AFF. 391, 391 (2005) ("Philosophers have disagreed about the place of human welfare in judgments about public policies generally and their distributive outcomes in particular. But virtually all agree that welfare effects should play *some* role, at least when welfare improvements can be achieved without violating 'side constraints.'" (citation omitted)).

12. In our view, of course, it is the only aspect of welfare.

happiness. Because virtually no one disputes that moment-by-moment happiness is at least a part of well-being, our proposed tool is useful regardless of whether one accepts our strong claim that happiness constitutes the entirety of well-being.

We take up five initial tasks in this first Part. In section I.A, we note the limits of our claim. Unlike utilitarians, we do not argue that well-being or quality of life is all that should matter to individuals and governments. We argue only that well-being is important and that happiness¹³ plausibly constitutes well-being. Thus, to whatever extent a society decides it wants to increase quality of life, the way to do so is to increase happiness. In sections I.B, I.C, and I.D, we make an initial case that happiness is what constitutes a person's quality of life. Section I.B argues that the experience of life is wholly sensory and concludes that improving the feeling of those sensory experiences is the only way to improve someone's life. Section I.C elaborates on the nature of positive and negative emotions and discusses the idea of aggregating these momentary emotions across a lifetime in order to gauge a person's overall quality of life. Section I.D argues that someone's evaluation of an experience carries no special weight beyond its effect on the person's feelings related to the experience. This section goes on to explain why moments, rather than longer durations such as the length of a completed project, are the relevant time interval for aggregation. Finally, section I.E discusses the new psychological tools for measuring happiness. These tools not only give us insight into the nature of people's experience of life, but also enable us to analyze policies through the lens of their effects on well-being.¹⁴

A. WEAK WELFARISM

Economists and utilitarian philosophers occupy such a central place in the literature on well-being that, to avoid confusion, we will take a moment to make explicit the difference between our claims and those of traditional welfarism or utilitarianism. Whereas those theories deem well-being the only thing of value and seek to maximize the overall amount of it, we make a more limited contention. Like the "weak welfarism" of Matthew Adler and Eric Posner,¹⁵ our approach is open to the possibility that things other than overall human welfare could have value. Examples include "moral rights, the fair distribution of welfare, and even moral considerations wholly detached from welfare, such as

13. We use interchangeably the terms "happiness," "positive affect," "positive mental states," and "feeling good." In section I.B, we argue that an individual's aggregated happiness—the sum of that individual's experiences over time—is the appropriate measure of that individual's "subjective well-being": her overall subjectively felt experience. We then proceed to use "subjective well-being" interchangeably with "happiness."

14. We explore this idea in Part IV.

15. See MATTHEW D. ADLER & ERIC A. POSNER, *NEW FOUNDATIONS OF COST-BENEFIT ANALYSIS* 52–61 (2006).

intrinsic environmental values.”¹⁶

We advocate only that a policymaker treat an increase in welfare as a positive thing, potentially to be weighed against other sorts of values. We view this claim as relatively uncontroversial and will treat it as little more than an assumption or axiom.¹⁷ The contrary view that welfare is not desirable—that there is no value in pursuing it even where all else is equal—is strongly at odds with standard intuitions and would likely produce policy results that most people would find unacceptable.¹⁸

B. HAPPINESS AND THE SUBJECTIVE EXPERIENCE OF LIFE

Like any animal, a person experiences life wholly through her thoughts, feelings, and sensory perceptions of the world. The person, in turn, is constituted of a set of physiological processes in her mind and body. All thoughts, feelings, and actions are, at bottom, a function of these processes.¹⁹

Some of a person’s experiences of life are negative, whereas others are positive. Touching a burning stove and recoiling in pain is a negative experience, whereas eating a chocolate-chip cookie and feeling a sensation of pleasure is a positive one. Even higher-order experiences, such as reading a book or thinking about a loved one, produce cognitive or emotional sensations in a person’s brain that the individual registers as positive or negative; either the individual is enjoying the book, or she is not. Because these sorts of experienced moments constitute a person’s life,²⁰ and because each moment is positive or negative for the person depending on her physiological experience of it (that is, how it makes her feel),²¹ these feelings make up the subjective quality of a life. They determine whether someone experiences her own life as positive

16. *Id.* at 53. Accordingly, our approach differs also from that proposed by Kaplow and Shavell, who contend that welfare should trump considerations unrelated to welfare. See LOUIS KAPLOW & STEVEN SHAVELL, *FAIRNESS VERSUS WELFARE* (2002).

17. See Kelman, *supra* note 11, at 391.

18. Indeed, even the leading critics of utilitarianism value welfare and thus do not oppose our suggestion that it be counted as a good for the purposes of policymaking. See, e.g., Michael S. Moore, *Torture and the Balance of Evils*, 23 *ISR. L. REV.* 280, 331–32 (1989) (arguing that even deontologists are not completely unconcerned with consequences).

19. Our approach to these issues is derived from our commitment to materialist or naturalist explanations of human behavior. See OWEN FLANAGAN, *THE REALLY HARD PROBLEM: MEANING IN THE MATERIAL WORLD* (2007). For a discussion of naturalism in legal philosophy, see BRIAN LEITER, *NATURALIZING JURISPRUDENCE: ESSAYS ON AMERICAN LEGAL REALISM AND NATURALISM IN LEGAL PHILOSOPHY* (2007). At later points, we will occasionally reference “feelings” without mentioning thoughts and sensory perceptions more generally. We mean it only as shorthand; each time we discuss “feelings,” we mean to incorporate the full range of human thoughts and sensations.

20. By this we mean that life is simply a collection of all of its moments.

21. Griffin argues that there is no sensation such that more of it is always better. GRIFFIN, *supra* note 4, ch. I; see also SUMNER, *supra* note 8, at 81–85. But this misunderstands the nature of the sensations at issue. There might be a point at which delicious food, or good conversation, or other inputs to happiness deliver negative returns (that is, make people feel less happy). But that is very different from the claim that there is a point at which the sensation of happiness itself makes people feel less happy. If a sensation makes someone feel less happy, then by definition the sensation is not happiness. See SUMNER, *supra* note 8, at 10.

or negative. What it means for something to be a bad experience for an individual is for it to make the individual feel bad. Negative feelings constitute bad life experiences, and positive feelings constitute good ones. Of course, a negative experience can increase welfare in the long run by decreasing the likelihood of more negative experiences in the future.

It could be argued that whether a moment is positive or negative for a person does not depend solely on that person's physiological experience of it. Indeed, disagreeing with the hedonic conception of welfare may well require such an argument. But what else could make it positive or negative? A person's experience of the world is exclusively physiological,²² and when in any moment someone has a positive or negative feeling, that feeling is her physiological experience of the moment. Unless she has other feelings simultaneously,²³ nothing else can comprise the experience for her because her feelings are the sum total of the way that she experiences life.

C. WELFARE AS HAPPINESS

We equate human welfare with the subjective, individual experience of positive feeling. On this view, the measure of welfare for a period of any duration, from a couple of minutes to an entire lifetime, is the aggregate of a person's moment-by-moment experiences of positive and negative feeling. This account of well-being as moment-by-moment affect owes much to Daniel Kahneman's work on "objective happiness,"²⁴ and it also evokes the accounts of welfare contained within the utilitarian theories of Jeremy Bentham and Peter Singer.²⁵ As a person progresses through life, her various experiences are associated with different emotional states, some of which will be positive, while others will be negative, neutral, or a combination of positive and negative.

22. We mean "physiological" in the broad sense of the word, including of course mental and emotional feelings. They, too, are produced by physical processes within the body. See ANTONIO R. DAMASIO, *THE FEELING OF WHAT HAPPENS: BODY AND EMOTION IN THE MAKING OF CONSCIOUSNESS* 53–56 (1999).

23. If so, then all of these feelings would be part of her level of happiness and therefore her well-being and quality of life.

24. Daniel Kahneman, *Experienced Utility and Objective Happiness: A Moment-Based Approach*, in CHOICES, VALUES, AND FRAMES 673 (Daniel Kahneman & Amos Tversky eds., 2000) [hereinafter Kahneman, *Experienced Utility*]; Daniel Kahneman, *Objective Happiness*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY 3 (Daniel Kahneman et al. eds., 1999) [hereinafter Kahneman, *Objective Happiness*].

25. Bentham and Singer argue for maximizing utility, whereas we make no claims about the moral significance of welfare relative to that of other possible values. Therefore, most of the traditional arguments leveled against utilitarianism are inapplicable to our claims. See JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION 12–13 (J.H. Burns & H.L.A. Hart eds., Clarendon Press 1996) (1789) ("An action then may be said to be conformable to the principle of utility . . . (meaning with respect to the community at large) when the tendency it has to augment the happiness of the community is greater than any it has to diminish it."); PETER SINGER, PRACTICAL ETHICS 14 (2d ed. 1993) (articulating an interest-based theory of utility).

This association occurs across the spectrum of emotions.²⁶ For example, positive feelings of love, joy, and awe might feel different from one another, but they hold in common a sensation of positivity—being drawn to the feeling rather than away from it.²⁷ Moreover, the various activities that a person engages in, from playing sports to dining with friends to making judgments about her life satisfaction, are each attended by positive or negative emotions. In terms of happiness, there is thus a commensurability among varying feelings and in turn the activities that influence those feelings.²⁸ People make these kinds of comparisons whenever they decide how to spend their time, and the well-being measures discussed below enable the measurement of the emotion people actually experience while doing different things.²⁹

Because well-being is, on our account, made up of subjectively felt experience, it follows that its ideal measure is one that perfectly tracks how people feel over time. Whether or not such perfection could theoretically be achieved by a device that constantly measured internal processes such as brain activity, at the moment we must settle for a proxy.³⁰ We analyze and compare the available proxies in section I.E.

D. FEELING VS. EVALUATING AND THE CHOICE OF THE TIME INTERVAL

Our theory is that a person's well-being can be plausibly understood as the aggregation of how she feels during all of the moments of her life. For these purposes, a moment refers simply to the shortest time interval in which someone can have a feeling.

Some might argue, however, that certain events should be considered as a whole, rather than as an aggregation of moments. Perhaps relatedly, one could claim that a person's evaluation of an event affects her well-being independently from how she feels about the event moment-by-moment. We reject this approach, and we believe that it improperly conflates what a person has actually experienced with the judgments the person has made about that experience.³¹

An example will help illustrate these points, as well as our responses to them. Suppose that someone has long hoped to run a marathon. She trains for many months, and finally the day of the race arrives. During the marathon, she feels

26. See JAY SCHULKIN, *BODILY SENSIBILITY: INTELLIGENT ACTION* 14 (2004) (“Behavioral systems are organized for approach and exploration and to avoid and reject objects.”).

27. *Id.*; Kahneman, *Experienced Utility*, *supra* note 24, at 683.

28. See Kahneman, *Objective Happiness*, *supra* note 24, at 8 (“[I]t appears that most moments of experience can be adequately characterized by a single summary value on the [Good-Bad] dimension.”).

29. See Kahneman, *Experienced Utility*, *supra* note 24, at 683.

30. See Adam J. Kolber, *The Experiential Future of the Law* 8–25 (Oct. 13, 2009) (unpublished manuscript), available at <http://www.ssrn.com/abstract=1488444>.

31. Our view might thus be said to focus on the synchronic rather than the diachronic, in that it aggregates each separate individual moment rather than viewing any one moment through the lens of its relationship to other moments. Cf. Andre Gallois, *Identity Over Time*, in *STANFORD ENCYCLOPEDIA OF PHILOSOPHY* (Edward N. Zalta ed., 2009), available at <http://plato.stanford.edu/entries/identity-time/>.

many moments of pain. But upon completing the race, she feels great satisfaction in her achievement. “That was absolutely worth it,” she announces. A critic of our hedonic approach to welfare might say that we cannot make sense of the runner’s proclamation that the marathon was “worth it” if we view her happiness only on a moment-by-moment basis. Such a view would not, according to the critic, capture the point that the marathon has increased the runner’s well-being because the runner was able to complete a project that was important to her.

This criticism contains three separate issues that must be disentangled. The first is whether it would be possible to make sense of the runner’s statement from the perspective of our feeling-based account of welfare. The second is whether the runner’s own evaluation of the race’s effect on her welfare should be given special weight that is not captured by our moment-by-moment approach. The third is whether the marathon should be viewed as an aggregated series of moments or instead as a single project.

1. Determining Worth by Aggregating Moments

The runner’s statement that the race was “worth it” is entirely plausible within the context of our conception of welfare. First, it may simply be that the marathoner’s feelings during the race involved more positive than negative feeling: the pain may have been offset by a deep satisfaction in striving to perform a difficult task of which she was capable. Such striving is often associated with the most intense state of positive affect.³² Second, even if the moments spent running the marathon were negative and outweighed (in intensity and duration) the moment of joy at the finish line, the marathon might well ultimately increase the runner’s long-term well-being by adding to her subsequent aggregated moments of happiness. She will probably remember fondly her accomplishment for the rest of her life, thereby experiencing countless moments of happiness—that is, the moments that occur whenever she thinks of the achievement and feels good about it.

The marathoner’s post-race proclamation could easily be attributable to this expectation. When we declare a difficult endeavor to have been worthwhile or express happiness at having completed one, we often do so because of our anticipation of the long-term benefits that the project’s completion will bring. We are happy to have finished because we recognize that over the coming weeks or months, the fact of having completed the project will pay dividends, dividends that will increase our net welfare. This explanation accounts conversely for the fact that, for example, someone who eats a delicious but unhealthy food may immediately regret having done so because he anticipates the future decrease in well-being that might be entailed. He may have to exercise more to lose the extra weight, eat more vegetables to counteract the

32. MIHALY CSIKSZENTMIHALYI, *FLOW: THE PSYCHOLOGY OF OPTIMAL EXPERIENCE* 96–100, 223–27 (1991).

negative nutritional consequences, or forswear other fatty foods for some period of time. His expressed regret—“That wasn’t worth it”—is a judgment about predicted long-term subjective well-being, and the marathoner’s statement may well be the same thing.³³

2. Moment-by-Moment Feeling vs. Assessed Well-Being

Let us assume for the sake of argument that neither of the conditions from the previous section hold true. Specifically, the pain of running the marathon exceeds the positive feeling, or sense of “flow,”³⁴ experienced during the race itself. In addition, no feelings of satisfaction occur after the race: for example, suppose the runner dies immediately upon completion of the race, from an unrelated physical condition that would have killed her at that moment regardless of whether she had run. In that case, running the marathon did not increase her well-being. Upon her death, if we were to look back at her life and evaluate the well-being she had during her life, then we would deem her to have had lower overall well-being than if she had done something on her last day that she would have enjoyed more than running the marathon. Forced to exclude the consideration of future benefit (future moments of happiness attributable to having run the race), most people would, we believe, find it intuitive that the marathon did not in fact increase the runner’s well-being.

But suppose the runner herself believes that the race did make her better off. If her statement that it was “worth it” does not refer either to the positive feeling (flow) of running the race or to the anticipated benefit of feeling good while recollecting her accomplishment, then what? The answer is that we do not have to take her word for it. A person’s own stated judgment that completing a project increased her well-being does not resolve whether the project in fact increased her well-being. Imagine a survivor of torture who tells himself that he was actually made stronger by the experience and is better for it. There may sometimes be good reasons, in terms of psychological health, for people to persuade themselves that an experience was valuable.³⁵ But when we, as objective observers, evaluate whether the person would have been better off not having been tortured, we are not bound by the judgment stated by the person himself. The same goes for the marathoner.

More broadly, we may ask *why* judgments or evaluations of the quality of an experience would matter independently of feelings.³⁶ To be sure, the judgment

33. If the marathoner in fact meant that her welfare was increased notwithstanding an overall worsening of her aggregated moments of happiness, then we would say she is mistaken. This point is dealt with fully in section I.D.2.

34. CSIKSZENTMIHALYI, *supra* note 32, at 94–116.

35. See Christopher Peterson, *Personal Control and Well-Being*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY*, *supra* note 24, at 288 (citing various studies suggesting that maintaining an optimistic attitude in the face of adversity benefits one’s welfare in measurable ways).

36. In fact, in many cases individuals’ judgments about their own lives track their moment-by-moment experiences. Measures of “life satisfaction,” which are associated to some degree with

may well involve positive feeling: while reflecting on the marathon, the runner feels good about what she has done. That good feeling counts, of course, in our assessment of her well-being. (And in the long run, the positive feelings associated with reflections about the experience may exceed any negative experience from the race itself.) But the good feeling from the reflection counts no more or less than does her negative feeling while running (assuming, by hypothesis, that it was negative). Evaluations are simply moments during one's life, no different in their inherent value or meaning from any other moments of felt experience.

3. Time Intervals: Projects vs. Moments

The third issue involves choosing the relevant time interval for aggregation. Should the marathon be deemed a single project—and thus counted toward the runner's well-being as one block of time that she regards positively—or instead an aggregation of moments that include substantial pain?

The problem with the “project-based” approach is that it excludes, without justification, parts of the person's life that she actually experienced. If she chooses to (or just does) remember the marathon positively, then that counts insofar as her memories themselves become experienced feelings in her life. Those memories or reflections on the marathon are part of her life while she feels them, no more or less so than the actual running was a part of her life while she felt it. Misremembering the pain affects the experience of recalling the marathon, but it does not retroactively eliminate from life the moments of feeling the pain as those moments happened. Those moments also count because they too were real. To view the marathon as a whole is to exclude a part of life that occurred (and was felt and experienced) and that therefore should not be excised from the record of the person's life.

E. MEASURING HAPPINESS

More than a century ago, the economist Francis Edgeworth proposed the possibility of developing a “hedonimeter” to measure the changes in pleasure and pain that an individual experiences.³⁷ Before such a tool could have been developed, however, it was rendered superfluous by the paradigm shift in economic theory toward the rational choice assumption that people naturally choose what makes them happy. In gauging people's welfare, the theory goes, economists could simply look to the decisions that people made and assume that, if they chose state *A* over state *B*, it was because *A* provided them more

judgments about life quality, are correlated with moment-by-moment measures of affect. *See infra* section I.E.3.

37. F.Y. EDGEWORTH, *MATHEMATICAL PSYCHICS: AN ESSAY ON THE APPLICATION OF MATHEMATICS TO THE MORAL SCIENCES* 98–102 (London, C. Kegan Paul & Co. 1881). On Edgeworth, see David Colander, *Retrospectives: Edgeworth's Hedonimeter and the Quest to Measure Utility*, 21 *J. ECON. PERSPECTIVES* 215, 216–19 (2007).

utility than *B*. This approach has been labeled “decision utility.”³⁸

Although direct measurement of welfare fell out of favor with mainstream economics throughout much of the twentieth century, some pockets of social science research kept the tradition alive, including the determination of Quality Adjusted Life Years (QALYs) that compares the value of living a given number of years in normal health with years of survival in disabling health conditions.³⁹ In addition, objective indicators of welfare, including GDP, infant mortality, and literacy, grew in popularity during this period. Not until the 1980s, however, did subjective assessments of well-being re-emerge as acceptable tools for measuring happiness. Since then, the variety of techniques available to researchers has expanded considerably.⁴⁰ In contrast to economic models, these tools enable measurement of “experience utility,” or the well-being that people actually feel.⁴¹

There are now a wide variety of available measures that purport to gauge well-being. In the sections that follow, we argue that of these, the best proxy for actual subjective well-being (and thus for human welfare) is the moment-by-moment experience sampling method.⁴² Sampling methods do the best job of measuring the essential constituents of welfare (momentary affect), and they substantially minimize many of the assessment concerns associated with other techniques. In addition, we provide evidence that the various happiness measures are substantially correlated with one another and with external reports of well-being. Finally, we briefly review some of hedonic psychology’s key findings and their implications for enhancing social welfare.

1. Experience Sampling Assessments

Even as a theoretical matter, we cannot know whether psychologists will ever be able to measure a person’s well-being purely through a physiological analysis of what occurs within her brain and body. In any event, the current state of neuroscience is such that our best way to learn how someone feels is simply to ask her. There are different ways to ask, though, and a breakthrough in social science has been the commitment to asking specific questions about an experience *during* the experience. In recent years psychologists have created a number of “ecological” assessments to measure the happiness associated with various

38. See Daniel Kahneman et al., *Back to Bentham? Explorations of Experienced Utility*, 112 Q. J. ECON. 375, 375–77 (1997).

39. See, e.g., MILTON C. WEINSTEIN & HARVEY V. FINEBERG, CLINICAL DECISION ANALYSIS 217–20 (1980) (discussing QALYs).

40. See William Pavot, *The Assessment of Subjective Well-Being: Successes and Shortfalls*, in THE SCIENCE OF SUBJECTIVE WELL-BEING 124, 124 (Michael Eid & Randy J. Larsen eds., 2008).

41. See Kahneman et al., *supra* note 38, at 375–77. Strictly speaking, a number of the survey methods discussed below measure “remembered utility,” or how people felt. See *id.* at 376. Nonetheless, they are qualitatively different from preference-based approaches to welfare that focus on anticipated emotion.

42. See *infra* section I.E.1.

events while they are occurring.⁴³ These techniques are particularly valuable for their contribution to measures of moment-by-moment affect. The experience sampling method (ESM), for example, uses palmtop computers to signal subjects randomly throughout their day.⁴⁴ When they receive a signal, subjects use the computers to indicate the activity they are engaged in and how they feel about it.⁴⁵ With technological advances and the ubiquity of palmtop computers, BlackBerries, and text messaging, it may soon be possible to develop large-scale indices of happiness based on regularly collected data from many of a given country's citizens.⁴⁶

Unlike surveys that ask subjects to record their satisfaction with life as a whole,⁴⁷ these moment-by-moment techniques reduce many of the measurement errors associated with memory and aggregation biases.⁴⁸ And while life satisfaction measures might cover broad swaths of experiences, momentary affect scales enable researchers to detect changes in emotion associated with narrower experiences and broader ones.⁴⁹ Importantly, momentary scales do not ignore the importance people may place on holistic satisfaction judgments or anticipated and remembered emotions. Such judgments are associated with positive or negative affect,⁵⁰ and a sufficiently fine-grained moment-by-moment measure of affect will detect them.⁵¹ Thus, a precise measure of moment-by-

43. See, e.g., JOEL M. HEKTER ET AL., EXPERIENCE SAMPLING METHOD: MEASURING THE QUALITY OF EVERYDAY LIFE 1–7, 81–102 (2007); Arthur A. Stone et al., *Ecological Momentary Assessment, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY*, supra note 24, at 26.

44. See, e.g., Christie N. Scollon et al., *Experience Sampling: Promises and Pitfall, Strengths and Weaknesses*, 4 J. HAPPINESS STUD. 5–8 (2003).

45. *Id.* at 6–8. Another technique, the day reconstruction method (DRM), asks participants to recall the activities of the previous day, isolate them into separate episodes, and assign each episode various emotional ratings. See Daniel Kahneman et al., *A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method*, 306 SCI. 1776, 1776–77 (2004).

46. See Ed Diener, *Subjective Well-Being: The Science of Happiness and a Proposal for a National Index*, 55 AM. PSYCHOL. 34, 40 (2000) (“I propose that the United States needs indicators of SWB that can be used to track happiness over time. Ideally, these indicators would include ESMs of nationally representative samples of respondents. National ESM surveys could provide valuable information on how frequently and intensely people feel satisfied and happy in various life circumstances and across types of situations.”). So far, Bhutan is the only country to have adopted a National Happiness Index. See Andrew C. Revkin, *A New Measure of Well-Being From a Happy Little Kingdom*, N.Y. TIMES, Oct. 4, 2005, at F1.

47. See *infra* section I.E.2.

48. See Daniel Kahneman & Richard H. Thaler, *Anomalies: Utility Maximization and Experienced Utility*, 20 J. ECON. PERSPECTIVES 221, 227–29 (2006).

49. See Daniel Kahneman & Robert Sugden, *Experienced Utility as a Standard of Policy Evaluation*, 32 ENVTL. & RESOURCE ECON. 161, 175 (2005).

50. See *supra* notes 20–23 and accompanying text.

51. Kelman suggests that the “higher-order meaning people attach to life experience” will be missed by momentary affect measures. See Kelman, *supra* note 11, at 406. While this might be true with the relatively coarse measurement techniques currently available to researchers, it is not conceptually true. Under our account, higher-order judgments are affect-laden experiences of certain duration, just like active or sensory experiences. Accordingly, the time people spend contemplating their lives and the emotions associated with those thoughts would be captured by an ideally fine-grained measure of momentary well-being.

moment emotion will detect not only embodied, physical affect, but the cognitive affect associated with contemplating one's life as well. Finally, because momentary measures can reduce each experience to a one-dimensional assessment of affect, taken over a particular duration, they allow for cardinal, rather than merely ordinal, comparisons of well-being. Accordingly, we believe that these sampling methods currently provide the best proxies for well-being.

2. Life Satisfaction Surveys

The earliest and still most widely used method for subjective assessment of well-being is the personal survey of life satisfaction.⁵² Although surveys can be used to measure various aspects of subjective well-being, they often rely on general questions like: "Taken as a whole, how satisfied are you with your life these days?"⁵³ Because these scales tend to have relatively few items, they can easily be combined with large-scale general population surveys that obtain data on many aspects of respondents' life circumstances.⁵⁴ This allows for analysis of the correlation between life satisfaction and demographic data such as age, wealth, health, family life, and employment. Initially, life satisfaction surveys utilized cross-sectional analyses (for example, by contrasting the self-reported well-being of married people with unmarried people).⁵⁵ More recently, however, researchers have turned to extensive longitudinal life satisfaction surveys that track individuals over a period of years.⁵⁶ Longitudinal studies allow researchers to match individuals' entry into a particular life circumstance (such as marriage) with changes in their life satisfaction, thus isolating the effect of the change and diminishing the effects of selection and unobserved variables.⁵⁷

Life satisfaction surveys require respondents to reflect on their experiences, to combine the ways those experiences made them feel, and to assign a score to the aggregate emotion. Although these surveys may in some circumstances serve as reasonable proxies for subjective well-being⁵⁸ (a point we return to

52. See Ed Diener, *Myths in the Science of Happiness, and Directions for Future Research*, in *THE SCIENCE OF SUBJECTIVE WELL-BEING*, *supra* note 40, at 493, 508.

53. The Satisfaction with Life Scale is a widely used five-item scale used to assess an individual's overall life satisfaction. See William Pavot & Ed Diener, *Review of the Satisfaction with Life Scale*, 5 *PSYCHOL. ASSESSMENT* 164, 164–65 (1993).

54. See Pavot, *supra* note 40, at 128–29 (the Satisfaction with Life Scale "offers very good internal consistency and temporal reliability, yet it is brief and easily incorporated into a larger research design").

55. For a review of such studies, see Michael Argyle, *Causes and Correlates of Happiness*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY*, *supra* note 24, at 353, 359–62.

56. See, e.g., Andrew E. Clark et al., *Lags and Leads in Life Satisfaction: A Test of the Baseline Hypothesis*, 118 *ECON. J.* F222, F228–36 (2008); Richard E. Lucas et al., *Reexamining Adaptation and the Set Point Model of Happiness: Reactions to Changes in Marital Status*, 84 *J. PERSONALITY & SOC. PSYCHOL.* 527 (2003) [hereinafter Lucas et al., *Reexamining*]; Richard E. Lucas, *Time Does Not Heal All Wounds: A Longitudinal Study of Reaction and Adaptation to Divorce*, 16 *PSYCHOL. SCI.* 945, 946 (2005) [hereinafter Lucas, *Time*].

57. See Lucas et al., *Reexamining*, *supra* note 56, at 529–31.

58. That is, they can help us estimate a person's aggregated moment-by-moment happiness to the extent that their results correlate with those of more sophisticated and relevant measures like ESM.

below), they can be affected by participants' cognitive and emotional biases.⁵⁹ Moreover, general, abstract surveys, such as life satisfaction surveys, suffer from two other dangers: people might forget how they felt during an experience if they are asked at a later time, and people might make mistakes in trying to aggregate different moments of experience.⁶⁰ For example, recent research has shown that instead of aggregating the sum of their hedonic responses to an event, people tend to calculate the event's effect by averaging only the peak response and the end response.⁶¹ This leads to lower hedonic reports for a four-minute negative experience than for the same experience with a one-minute period of slightly less painful experience appended to it.⁶² Concerns about such biased responses to surveys motivated researchers to develop well-being assessments that measured responses in close to real time.⁶³

Nonetheless, life satisfaction surveys can have value as an inexpensive proxy for more refined measures of well-being, especially to the extent that their reliability can be tested by the level of correlation with ESM studies.

3. Reliability and Validity

Despite the fact that moment-by-moment measures of well-being are more reliable than holistic life satisfaction inquiries, it is noteworthy that these different measures of well-being correlate strongly with one another. Overall life satisfaction is correlated both with the amount of positive and negative affect that a person feels⁶⁴ and with her satisfaction with the domains of her life.⁶⁵ In addition, subjective reports of well-being are strongly correlated with one another and with external measures such as third-party informant reports,⁶⁶ facial expressions,⁶⁷ and neurological data.⁶⁸ These facts lend credence to the notion that "happiness" is a valid, distinct construct that moment-by-moment

59. See Kahneman et al., *supra* note 45, at 1776–77.

60. *Id.*

61. See Kahneman & Thaler, *supra* note 48, at 227 (finding that people's ratings of a hedonic experience seem to be based on an average of the most intense aspect of the experience (the peak) and the final aspects of the experience (the end)).

62. *Id.* at 228.

63. See Kahneman et al., *supra* note 45, at 1776–77.

64. See Michael Eid & Ed Diener, *Global Judgments of Subjective Well-Being: Situational Variability and Long-Term Stability*, 65 SOC. INDICATORS RES. 245, 262–68 (2004).

65. See Daniel Heller et al., *The Role of Person Versus Situation in Life Satisfaction: A Critical Examination*, 130 PSYCHOL. BULL. 574, 575–76 (2004) (arguing that while personal predisposition has an important effect on one's happiness, "both logical considerations and empirical findings support the idea that satisfaction with major life domains (e.g., job and marriage) is [also] associated with life satisfaction").

66. See Heidi S. Lepper, *Use of Other-Reports to Validate Subjective Well-Being Measures*, 44 SOC. INDICATORS RES. 367, 372–77 (1998); E. Sandvik et al., *Subjective Well-Being: The Convergence and Stability of Self-Report and Non-Self-Report Measures*, 61 J. PERSONALITY 317, 327–36 (1993).

67. See Tiffany A. Ito & John T. Cacioppo, *The Psychophysiology of Utility Appraisals*, in WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY, *supra* note 24, at 470, 479–81.

68. See *id.* at 470–79; T.G. Dinan, *Glucocorticoids and the Genesis of Depressive Illness: A Psychobiological Model*, 164 BRIT. J. PSYCHIATRY 365 (1994).

measures of affect are capable of capturing fully.

Well-being measures also tend to be fairly stable over time and exhibit high test-retest reliability.⁶⁹ But despite their overall stability, they are also sensitive to changes in circumstance such that people who experience apparently negative events do indeed report lower levels of well-being (at least for a time).⁷⁰ This implies that people are capable of consistently reporting how experiences make them feel, and that their emotional responses generally exhibit predictable patterns following specific events.

4. Hedonic Psychology's Key Findings

Using the techniques discussed above, researchers have been able to study the kinds of things that make people happy, the intensity and duration of people's affective responses, and their ability to predict what will make them happy. Although some of their findings are relatively unsurprising, others are highly counterintuitive. This research, along with work on cognitive and emotional biases in decision making, has challenged the economists' assumption that people regularly choose what will make them happy.

Hedonic psychology has shown that well-being is based considerably less on individual life circumstances than previously thought.⁷¹ For example, increases in wealth are only weakly correlated with feelings of positive affect,⁷² and people who become disabled often experience a noteworthy rebound in their happiness within a couple of years.⁷³ Well-being's relative resilience in the face of these kinds of external circumstances is likely due to people's ability to adapt hedonically to life events.⁷⁴ Although hedonic adaptation's effects are substantial, studies show that people do a poor job of remembering and anticipating adaptation. Accordingly, they tend to be unsuccessful at predicting certain aspects of an event's hedonic impact.⁷⁵ Psychologists refer to these failures as affective forecasting errors,⁷⁶ and they seem to exist both for rare occurrences

69. See Richard E. Lucas & Ed Diener, *Personality and Subjective Well-Being*, in *THE SCIENCE OF WELL-BEING* 75, 89–92 (Ed Diener ed., 2009); Sandvik et al., *supra* note 66, at 339.

70. See Lucas et al., *Reexamining*, *supra* note 56, at 535.

71. See Kahneman et al., *supra* note 45, at 1778.

72. See *id.*

73. For a review, see Shane Frederick & George Loewenstein, *Hedonic Adaptation*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY*, *supra* note 24, at 302, 312.

74. See *id.*

75. 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, 111 (2005) (“One of the most commonly replicated ‘happiness gaps’ is that observed between the self-rated quality of life of people with health conditions and healthy people’s estimates of what their quality of life would be if they had those conditions” (citation omitted)); Timothy D. Wilson & Daniel T. Gilbert, *Affective Forecasting: Knowing What to Want*, 14 *CURRENT DIRECTIONS IN PSYCHOL. SCI.* 131 (2005).

76. Wilson & Gilbert, *supra* note 75, at 134.

and for mundane ones.⁷⁷

In addition to the difficulties people face making decisions about which choices will make them most happy, their predictions are further handicapped by a variety of emotional and cognitive biases that affect judgment. For example, the decision making context plays a considerable role in the choices that people make.⁷⁸ Their decisions are affected by their moods, situational factors, and the way their choices are framed.⁷⁹ Instead of being expert utility maximizers, in many cases people are at best boundedly rational. These findings, combined with the research on happiness and affective forecasting, call into question the assumption that people regularly choose the things that make them happy. The findings thus decouple happiness and preference satisfaction.

In this Part, we have offered an affirmative case for understanding welfare as subjective well-being, and we have analyzed the psychological tools available for measuring it. Although increasing welfare is not the only conceivable goal of legal policy, it is widely regarded as one of the most important of such goals. To the extent that governments seek to increase welfare, they should promote subjective well-being—the aggregate of subjectively experienced moment-by-moment affect. Although a number of potentially acceptable proxies for well-being exist, those that rely on momentary assessments of experienced happiness are conceptually closest and empirically most valid. Having made this initial case, in the Parts that follow we defend our conception of well-being against its strongest competitors.

II. HAPPINESS AS AN ALTERNATIVE TO OBJECTIVIST CONCEPTIONS OF WELFARE

Our thesis is modest: it is plausible to conceive of human well-being as the aggregation of moment-by-moment feeling throughout a lifetime.⁸⁰ For something to benefit a person is for it to improve that aggregated feeling—to make the person experience more positive feeling than she would otherwise have experienced.

Two features of this approach tend to differentiate it from the alternative theories that will be mentioned in this Part. First, we argue that well-being depends solely on how a person feels rather than on any other (for example, more objective) consideration or fact. A person has well-being to the extent that she is happy, regardless of the objective conditions of her life. Second, well-being can be influenced only by those things that affect a person's sensory, emotional, or cognitive experience of life. Anything that is outside this veil of

77. See Peter Ayton et al., *Affective Forecasting: Why Can't People Predict Their Emotions?*, 13 THINKING & REASONING 62, 68–70, 75–79 (2007).

78. See George Loewenstein et al., *Projection Bias in Predicting Future Utility*, 118 Q. J. ECON. 1209, 1238 (2003).

79. See Christopher K. Hsee et al., *Hedonomics: Bridging Decision Research with Happiness Research*, 3 PERSP. ON PSYCHOL. SCI. 224, 231–37 (2008).

80. Again, we use “feeling” as shorthand for “feelings, thoughts, and emotions”—all sensory, cognitive, and emotional experiences a person might have.

experience and has no effect on it is irrelevant to the quality of a person's life. We believe that it is plausible to base a conception of welfare on these two principles.

The first feature means that someone who is poor but happy is better off than someone who is rich but unhappy. The second feature means that a person's happiness is unaffected by things she is unaware of, as long as they do not affect her experience of life. A happy person is better off than an unhappy one, even if her happiness is based on mistaken beliefs about her life. A spouse's secret infidelity does not affect one's well-being unless one learns of it or otherwise experiences it as part of one's own life (for example, being treated differently by the spouse or by others). We will discuss these examples in more detail in the final section of this Part.

We hasten to add that we do not intend a full critique of other views of welfare, which would be impossible without considering the relevant work in much greater detail than we do here. We mean only to highlight what we believe are the intuitively attractive features of a hedonic account of welfare and argue that such a conception of welfare is capable of resisting the most important criticisms that have been leveled against it. It is also worth noting that the value and usefulness of well-being analysis—the tool we describe in Part IV—does not depend upon our strong claims about the nature of welfare. Those who hold alternative conceptions of welfare do not deny that subjective well-being constitutes at least one important component of welfare. A tool measuring that component is thus a step forward in crafting welfare-enhancing public policy. The tool's actual usefulness should be rendered even less controversial by the fact that the examples posing the greatest challenge to subjectivism are those that bear the least resemblance to everyday reality. Even those who remain unconvinced by our claim that moment-by-moment feeling is, by itself, a plausible understanding of welfare should thus welcome the tool we introduce in Part IV.

A. OBJECTIVIST CONCEPTIONS OF WELFARE

A number of scholars have advanced objectivist conceptions of welfare, by which we mean conceptions in which an individual's welfare depends to some extent on objective considerations that the individual may not herself derive enjoyment from.⁸¹ These approaches are all quite distinct, and as we note above, we do not intend to examine or criticize any approach in detail. Rather, our goal is to contrast objective and subjective approaches in general and highlight what we believe to be the advantages of the latter. To illustrate these points we employ Amartya Sen's work on welfare because it is among the most compelling and influential within the field.⁸²

Sen has argued that a person's welfare ("advancement") is defined by the set

81. See *infra* notes 84–87 and accompanying text.

82. Sen has of course done a great deal of other work, which we do not discuss here.

of capabilities she possesses, capabilities being “the alternative combinations of things a person is able to do or be—the various ‘functionings’ he or she can achieve.”⁸³ The things valued by this approach fit into several categories: “(1) well-being achievement, (2) agency achievement, (3) well-being freedom, and (4) agency freedom.”⁸⁴ The first refers to a person’s subjective well-being; the second refers to the extent to which she gets what she wants; the third refers to her freedom to achieve well-being if she so chooses; and the fourth refers to her freedom to get what she wants if she so chooses.⁸⁵

We believe that it is plausible to construct an understanding of well-being (or advancement) that involves only the first of these categories, whereas Sen conceives well-being as a combination of the four. Unlike Sen, we believe that the other three categories are mere means to the end of achieving well-being. (It is telling that Sen labels the first category as the achievement of well-being; that category captures, not coincidentally, what it means to achieve or have well-being.)⁸⁶ Getting what one wants affects one’s welfare only insofar as it makes one happy: acquiring the house of your dreams does not improve your life if it turns out not to make you any happier, and a successful attempt to save five people by sacrificing your own life would improve their welfare but not yours. We discuss these points in more detail in Part III.

Similarly, the value of increasing a person’s freedom to achieve happiness or of increasing her freedom to get what she wants is reflected in her well-being only if her happiness actually increases. If more choices lead her to a result that is worse in terms of her experience of life, then her well-being is reduced rather than increased.⁸⁷

These conclusions follow from the two principles articulated at the beginning of this Part: that well-being must credit a person’s experience of her own life over others’ “objective” criteria, and that well-being can be influenced only by those things that affect a person’s experience of life.

Any rival conception of well-being—including the capabilities approach, the various objective-list theories,⁸⁸ and nature-fulfillment accounts⁸⁹—will some-

83. Amartya Sen, *Capability and Well-Being*, in *THE QUALITY OF LIFE* 30, 30 (Martha Nussbaum & Amartya Sen eds., 1993); see also SEN, *supra* note 4.

84. *Id.* at 35 (internal quotation marks omitted).

85. See *id.* But see SUMNER, *supra* note 8, at 64–67 (suggesting that Sen’s theory may be subjectively oriented).

86. All objective accounts of welfare retain a substantial role for subjective experience just as Sen’s does. Accordingly, the subjective experience-based decision procedure we outline below has considerable relevance even to the committed objectivist.

87. One empirical study demonstrates that more choices can lead to worse outcomes. See Sheena S. Iyengar & Mark R. Lepper, *When Choice Is Demotivating: Can One Desire Too Much of a Good Thing*, 79 J. PERSONALITY & SOC. PSYCHOL. 995, 1003 (2000) (showing that subjects presented with a choice between six gourmet jams were happier with their selection than those presented with twenty-four jams).

88. See HAYBRON, *supra* note 2, at 287 n.23 (collecting sources). Sen’s capabilities approach is not an objective-list theory, but we group the two categories here because our objections to them are similar.

89. *E.g.*, FOOT, *supra* note 4; see also Michael Thompson, *The Representation of Life*, in *VIRTUES AND REASONS* 247–97 (Rosalind Hursthouse et al. eds., 1995); ROSALIND HURSTHOUSE, *ON VIRTUE ETHICS*

times hold that a person is better off miserable than happy: that is what it means to conceive of well-being as anything other than positive affect alone. We believe that such views do not take seriously enough the point that an individual's well-being is *hers*.⁹⁰ What is best for her cannot be determined independently of what she likes, of what brings her positive emotions like joy and contentment. What is best for her is bound up inextricably with her feelings and her experience of life. She, not a policymaker or philosopher, lives her life; and her experience of it as positive or negative is the ultimate yardstick by which her welfare must be measured.⁹¹ We think that a theory that denies these points is less intuitively compelling than one that ties an individual's well-being to her own experience of life.

To be sure, Sen does not aim to impose anything on people or to force them to do anything against their will; he merely wants to give them opportunities and to help them achieve happiness and other goals of theirs. Yet Sen's approach commits him to the proposition that someone can benefit from a thing that does not affect her life at all or that does not affect it positively in terms of her own experience of life. To view a miserable person with these capabilities as having greater well-being than a happy person without them is to privilege an outsider's conception of what is good for these individuals over the feelings of the individuals themselves. We believe that most people would intuitively reject such a conception in favor of a purely subjective one: a person's well-being is determined by her own experience, not by some objective assessment of the conditions under which that experience takes place. Those conditions affect her well-being only if they decrease *her* enjoyment—and thus worsen *her* experience—of life. We elaborate further upon these arguments and address the objections to our view in sections II.B and II.C.

B. CONFRONTING THE HARDEST CASES

Critics of the hedonic conception of welfare often cite hypotheticals that are

(1999). Our objections to nature-fulfillment approaches are closely related to those regarding capabilities-based and objective-list theories. Like those other theories, nature fulfillment is hamstrung by its inability to accord sufficient value to the subjective experience of life. Doing well, an activity characteristic of being human, would probably make the person doing it feel good, but if it did not do so—if for example it made her miserable, and if she did not value it—then why would the activity nonetheless have increased her well-being?

Moreover, there is serious disagreement about the qualities characteristic of a human being and even about whether the concept of characteristic qualities may be applied accurately to human beings at all. See KWAME ANTHONY APPIAH, *EXPERIMENTS IN ETHICS* 38–39 (2008). If there are such qualities, then some of them might not be ones that Aristotelians or anyone else would want to endorse as virtuous.

There are, in addition, virtue ethicists whose approaches are not properly classified as involving nature fulfillment. *E.g.*, ALASDAIR MACINTYRE, *AFTER VIRTUE* (1991); MICHAEL SLOTE, *FROM MORALITY TO VIRTUE* (1992); BERNARD WILLIAMS, *MORALITY: AN INTRODUCTION TO ETHICS* (1972). To the extent that they take positions regarding the nature of welfare, our very limited response is similar to the one we offer to objective approaches more broadly.

90. SUMNER, *supra* note 8.

91. *Id.* at 42–44.

said to reveal the weaknesses of that conception. In this section, we will confront directly the most difficult ones.

Here are three such examples. In each case, the question is whether *A* or *B* has more welfare.

Example 1

A's spouse is cheating on her, but she is unaware of it and is happy in her marriage. She would be miserable if she knew the truth, but she never learns of it and is never affected by it at all.

B's spouse is faithful, and *B* assesses her marriage accurately. But she is less happy than is *A*.⁹²

Example 2

A lives in poverty in a society that discriminates against her based on her sex. But she has adapted to the poverty and discrimination and feels quite happy despite it.⁹³

B lives a life of comfort, activity, and commitment to justice, all in a society that gives her full political and social rights and nourishes her capabilities. But she feels less happy than does *A* throughout her life.

Example 3

A feels happy, but only because she has chosen to hook herself up to an experience machine. She is having (unbeknownst to her conscious mind) no actual experiences in the real world.⁹⁴

B feels less happy but is living an ordinary life in the world, hooked up to no machine.

In all three examples, we believe that *A* has more welfare than does *B*.

Consider Example 1. Anyone who deems *B* to be better off than *A* must explain how a person's well-being can be affected by things wholly outside of her veil of experience. As we have argued, a person's life is her sensory

92. See Matthew D. Adler & Eric A. Posner, *Happiness Research and Cost-Benefit Analysis*, 37 J. LEGAL STUD. S253, S257–59 (2008); see also ADLER & POSNER, *supra* note 15, at 30 (providing a related example).

93. See Martha C. Nussbaum, *Who Is the Happy Warrior? Philosophy Poses Questions to Psychology*, 37 J. LEGAL STUD. S81, S99–100 (2008).

94. The concept of the experience machine was introduced by Robert Nozick. See ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 42–45 (1974). In his thought experiment, an individual could choose to enter a machine that would make her think she was experiencing anything she desired; in real life, however, the individual would be floating in a tank and would have electrodes attached to her brain. *Id.* at 42. While inside the machine, the individual would have no idea she was not living in the real world. *Id.* at 43.

experience of the world. Anything that has no effect on that experience does not influence her life and therefore does not influence her well-being. As we will discuss in Part III, an animal lover is not made better off by the survival of a squirrel in a far-off land if the animal lover never learns of that survival and is never affected by it. Similarly, someone is not made better or worse off by events that occur after her death, no matter how she would have felt about those events had she known about them while she was alive. Well-being concerns one's experience of life, and something must affect that experience in order to affect well-being.

If one's initial intuition is that *B* might be better off than *A*, what accounts for that? We suspect that the intuition comes from considerations ruled out by the hypothetical: for example, people who know the truth (including *A*'s cheating spouse) would treat *A* differently as a result of knowing, and *A* would be affected negatively by that different treatment. These hypotheticals can create problems for our intuitions because they ask us to accept analytically clean frameworks that are at odds with real experience—for example, that *A* will never learn the truth and will not be indirectly affected by it in ways that make her less happy than *B*. Such assurances do not exist in real life, but we believe that if the example's rules are taken seriously, then it makes more sense to say that *A* is better off.

Example 1 thus pits happiness against the truth. The truth may have some sort of objective moral value, but if it has *value that counts as part of welfare*, then what would that value be? We believe it would be the sort of thing ruled out by the hypothetical: When your happiness depends on a lie of which you are unaware, then that happiness is more vulnerable to being undermined than if it were based on the truth. You might learn the truth, or else the truth might interfere negatively with your life in a less direct way. So we have a valid intuitive attachment to the truth, even as regards welfare—but that attachment makes sense only insofar as truth-based happiness is, all else equal, more reliable in the end for maximizing one's overall happiness than is falsehood-based happiness. Example 1, however, requires us to take all considerations like these out of the equation and to assume that *A* will not be harmed (in terms of a reduction in her subjective well-being)⁹⁵ by her unawareness. If we force ourselves to believe that assumption, then the view that happiness is the sole component of welfare retains its intuitive appeal.

Consider a related example. Imagine that a driver and passenger are involved in a serious automobile accident. They are both severely injured and rushed to a hospital, where the passenger dies almost immediately and the driver has only a few minutes or hours to live. The driver, who feels responsible for the terrible event (though she is not at fault), asks her doctors whether the passenger is okay. The doctors, not wishing to needlessly traumatize her, tell her that the passenger is fine. We suspect that most readers will agree that the doctors

95. We address the possibility of harm to one's preferences in Part III.

thereby increased the driver's welfare, even though they told the driver a lie. The reason, of course, is that this lie spared the driver some grief—it made her happier. That happiness is no less real, and no less significant to the driver herself, merely because it is based upon a falsehood.⁹⁶

Example 2 involves related concerns. If we try to imagine ourselves as *A* or *B*, it seems that we would be much happier as *B*. But of course the point of the example is to stipulate that *A* is happier, so as to test the contention that happiness constitutes welfare. Why might *A* be happier? Maybe *A* belongs to a tight-knit social group of friends, extended family, or fellow religious worshippers, whereas *B* has fewer if any close social ties. If we start to flesh out the reasons that *A* might be happier (feel better and have more subjective well-being) than *B*, our sense that *B*'s life seems better starts to erode. The more we come to believe that *A* is actually happier, the clearer it becomes that *A* has a better life.

Of course, a critic could argue that this sort of fleshing out involves attributing to *A* but not to *B* aspects of life that are valuable in non-hedonic terms—that we care about social ties not because they make us feel good, but because they are part of, for example, human flourishing, or so the argument would go. It is hard to sort out answers to such challenges because there is overlap between that which is valued by other theories (for example, capabilities-based, objective-list, or nature-fulfillment conceptions of welfare) and that which makes us feel good, and it can be difficult to know which one is driving our positive assessment of the thing in question.

To address this difficulty, let us take another cut at the issue by considering whether one given individual, *C*, would have more welfare if he lived in an oppressive society but felt happier or if he lived in a free and just society but felt less happy. In the oppressive society, he could not go to school beyond age twelve or play a role in the workforce. In the free society, school is not only permitted but required through age eighteen, and every opportunity is available. Assume, merely for the sake of elucidating this hypothetical example, that *C* does not enjoy school; it involves a lot of work and pressure, and he is not excited by or interested in the knowledge being bestowed or in the process of acquiring it. Assume (again, just for the sake of making this theoretical point) also that *C* does not enjoy working, even when doing things that are thought-provoking and socially valuable. Work feels like a grind, with pressure and deadlines. Although in the free society *C* was able to choose a different career and might (or might not) have been able to find one that would have given him greater enjoyment, the countless available options kept him from being funneled (as he is in the oppressive society) into a life of low stress that he likes much better. In the oppressive society *C* never even realizes he is being oppressed because, among other things, he likes all the things he ends up doing.

Let us be completely clear about several points. First, we absolutely and

96. We thank Richard McAdams and Lior Strahilevitz for suggesting this point.

obviously do not believe that people enjoy being oppressed in any way, or that they are actually better off if oppressed: in the real world, contra the hypothetical, people of course tend to be much happier if they do not suffer oppression. Second, in no way would we ever suggest that oppressed people actually derive less gratification from work or from school than do others. We certainly do not believe anything like that. The person in the example is hypothetical in every way. Third, even if someone were somehow happier in an oppressive society, that does not excuse the oppression. There are normative reasons independent of welfare for rejecting such oppressive practices, and nothing we say here or elsewhere is at odds with such reasons in any way whatsoever.

Having emphasized those caveats, the relevant question is a theoretical one: does *C* have more welfare in the oppressive society (where he lives a contented, relatively inactive life) or in the free society (where he lives a stressful, active life)? The answer is that he has more welfare in the oppressive society. The sedentary life there is better *for him* than is the active alternative. Welfare is a concept concerned exclusively with *his* well-being. To insist that his life in the free society has greater welfare would be to fail to give full credit to his individuality. What makes him happy is to be relatively inactive, and that fact is credited fully by a conception of welfare that cares only about what makes him happy.

In this conception that we defend, there is nothing wrong with being inactive, at least as far as one's own welfare is concerned, so long as being inactive makes one happy. Those who take a different view impose some sort of objective code upon individuals who do not approach life the same way. More to the point, such an objectivist view would claim that the *welfare* of these individuals is better served by what the view's proponents value than by what the individuals themselves enjoy. According to the objectivist view, not only do the individuals not know what is good for them, but their experience of what is good for themselves does not determine what is good for them. Example 2, which on its face seems so thorny for our mental-state theory, thus lays bare the decisive weakness of objective conceptions of welfare.⁹⁷

97. It should go without saying that we are not defending repressive societies. With regard to Example 2, Martha Nussbaum argues as follows:

[P]eople who were not brought up to think of themselves as equal citizens with a full range of citizens' rights will not report dissatisfaction at the absence of equality—until a protest movement galvanizes awareness. . . . So deferring to the subjective experience of pleasure or satisfaction will often bias the social inquiry in the direction of an unjust status quo.

Nussbaum, *supra* note 93, at S99–100. This argument is entirely compatible with our approach. We do not argue for crafting social policy that is based solely on maximization of subjective well-being. Moreover, even a happiness maximizer might well take the view that, in the long run, happiness is served by the sort of political system that Nussbaum advocates. This sort of view applies as well to Example 1, in which *A*'s happiness is precarious and constantly endangered by the threat of learning the truth or of being affected negatively by the actions of others who know the truth. And apart from those concerns, there are welfare-independent arguments to be made in favor of policies that promote lives like *B*'s rather than *A*'s in all three examples.

This brings us finally to Example 3, the experience machine.⁹⁸ This is the principal argument deployed against hedonism by L.W. Sumner, James Griffin, and many others.⁹⁹ Could someone sitting motionless with her head attached to electrodes really have greater welfare than someone whose experiences are real? The answer is yes, even though there are all sorts of reasons for people not to want to attach themselves to the machine. For example, they might not want to forego the opportunity to use their lives to improve the lives of others; or they might not be convinced the machine will actually work; or they might fear that while on the machine, they will be vulnerable to harm from those in the real world. When we ask whether someone attached to the machine has greater welfare, we must look behind whatever visceral aversion to the machine we might have and assess (1) whether that aversion relates to welfare and (2) whether the aversion springs from rejecting the rules of the hypothetical example.

We experience the world through our senses, and in that respect the machine life is no less real than is ordinary life. When we picture the machine life, we get a mental image of what we look like to someone who is not on the machine (that is, we look like someone sitting alone, plugged into electrodes). But life within the world created by the machine would look like ordinary life, complete with social ties, soaring natural beauty, and whatever else the individual derives happiness from. To the extent that negative feelings are necessary to maximize overall happiness,¹⁰⁰ those negative feelings would be present too. Absent would be any pain or suffering (much less early death) that is not necessary for overall happiness.¹⁰¹ In other words, a life on the machine is a life that would be self-evidently wonderful for the person living it if she were living it in the real world. The question is whether it matters that she is living it on the machine.

Our answer is that it matters, but not in terms of *her welfare*. Once she is attached to the machine, her welfare is unaffected by the fact of being attached to it. By hypothesis, she has no awareness that her machine life is anything other than real. Compare two parallel lives, one in which a person eschews the machine and one in which she attaches herself to it, say at age twenty. In the machine life she is enormously happy until she dies at age one hundred. What if she were to die tragically in the alternative real life at twenty-one? Would the real life have been one in which she had greater welfare, one that was better *for her*, than the machine life? Absolutely not. And the answer does not change if in the real life she lived until twenty-five, or forty-five, or one hundred and was relatively unhappy. Feeling bad or being unhappy is worse for a person than is

98. NOZICK, *supra* note 94.

99. *See, e.g.*, ADLER & POSNER, *supra* note 15; GRIFFIN, *supra* note 4; SUMNER, *supra* note 8.

100. For example, it might be the case that positive feelings are more intense if a person has some negative feelings to contrast them with.

101. *Cf.* Nussbaum, *supra* note 93, at S107 (“Public policy should also focus on the mitigation of the sort of pain that is not an enrichment of the soul or a deepening of self-knowledge, and there is a lot of pain that is not conducive to anything good.”).

feeling good or being happy.¹⁰²

Finally, it is important to note that even if one disagrees with the preceding arguments and remains skeptical of the subjective approach, these examples do not demonstrate that subjective well-being has *no* role in objective conceptions of welfare, or even that it does not play a large role. Imagine that the hypotheticals were adjusted to stipulate that *A* is far, far happier than *B*. We suspect that under these circumstances few people would doubt that *A* has greater welfare as well. Accordingly, measures of subjective well-being must be capturing some large proportion of what even committed objectivists understand as welfare. Our frequent points of agreement with objective approaches, detailed in this Part, point to that fact as well. In addition, it is worth noting that many of the examples deployed against the hedonic approach—for instance, happy individuals in oppressive societies—largely do not reflect actual experience. By and large, citizens of poor, oppressive countries are far less happy than citizens of free societies.¹⁰³ At most, then, these sorts of hypothetical cases have purchase only with respect to a miniscule sliver of the population. In the vast majority of cases, an individual's hedonic state gives an accurate account of the person's well-being. Thus, even a committed objectivist who is unconvinced by these arguments has reason to embrace well-being analysis as we describe it in Part IV.

C. RESPONDING TO NUSSBAUM'S DISCUSSION OF THE HEDONIC CONCEPTION OF WELFARE

Martha Nussbaum recently published a sustained critique of the hedonic conception of welfare, in the context of a symposium about the new findings of hedonic psychology.¹⁰⁴ We address her arguments in the sections that follow. We focus on Nussbaum's article because it is uniquely significant: a direct commentary on hedonic psychology by one of the nation's leading philosophers. In the course of addressing the points she makes, we flesh out our broader argument that feeling good constitutes well-being.

1. Measuring Pleasure and Life Satisfaction

If we are right that welfare is of value and that subjective well-being constitutes welfare, then it is important to refine our tools for measuring subjective well-being. Nussbaum contributes to this project by noting several concerns: that the concept of "pleasure" encompasses multiple feelings or sensations that differ qualitatively from one another,¹⁰⁵ that aggregating experi-

102. In addition, it is worth noting that examples such as the experience machine—and many of the other cases we discuss in this section—are far divorced from everyday reality. If the end objective is to formulate a workable welfare-based decision procedure, these attacks lose some of their persuasive force.

103. See Eric A. Posner, *Human Welfare, Not Human Rights*, 108 COLUM. L. REV. 1758, 1785 (2008).

104. Nussbaum, *supra* note 93.

105. See *id.* at S82–86.

ences into one unitary measure of life satisfaction may be difficult or impossible,¹⁰⁶ and that there may be a problematic ambiguity in the question about life satisfaction.¹⁰⁷

We regard the first issue, the nature of pleasure, to represent primarily a physiological question. Could it not someday be answered by comparing the neurological processes that occur when someone eats a steak to those that occur when she listens to Mahler? Research supports the view that different sorts of good feelings share a common thread that makes us like having those feelings and distinguishes them from negative feelings.¹⁰⁸

Even if it were true that pleasure is a hopelessly messy and complicated phenomenon, comprising innumerable different shades of feeling and including even certain sorts of painful emotions, that would not invalidate the project of measuring subjective well-being and trying to promote it. There will always be more to learn about happiness for scholars of biology, social science, and philosophy, and the added knowledge will be most helpful in tailoring policies that promote happiness. It does not follow, though, that happiness-promoting policies cannot usefully be pursued until every possible wrinkle has been sorted out—any more than it would make sense to delay the establishment of governments before we had a full understanding of what the best system would entail.¹⁰⁹

Similarly, the potential difficulties in aggregation are cause for care and attention but are hardly fatal to our project. According to Nussbaum, survey questions that ask people to rate their life satisfaction “bully” subjects into aggregating their experiences unnaturally: “There is no opportunity for them to answer something plausible, such as ‘Well, my health is good, and my work is going well, but I am very upset about the Iraq war, and one of my friends is very ill.’”¹¹⁰ We agree that many different sorts of considerations can compose how one feels about one’s life, and that assigning a number to one’s life satisfaction is a blunt instrument that obscures this complexity.

That said, much of life revolves around such simplifications of an impossibly complex reality, simplifications that are nevertheless of enormous practical value. Virtually every decision we make involves some sort of rough-and-ready calculation that ignores many relevant considerations. Even Nussbaum’s own example of a “plausible” answer abounds with aggregations that simplify and distort reality. The statement, “My work is going well,” glosses over the virtually infinite factors that could influence one’s assessment of that large part

106. *See id.* at S86.

107. *See id.* at S86–88.

108. *See* SCHULKIN, *supra* note 26, at 14–19; Kahneman, *Experienced Utility*, *supra* note 24, at 681–85.

109. *But cf.* Nussbaum, *supra* note 93, at S108 (“[T]he appeal to subjective well-being . . . is not utterly useless, but at present is so riddled with conception confusion and normative naïveté that we had better pause and sort things out before going any further.”).

110. *Id.* at S86.

of life, and yet (as Nussbaum affirms) it is a plausible statement because people engage in such aggregating glosses all of the time. A negative interaction with a co-worker, for example, is understandably swept under the rug by that statement because the interaction is deemed insufficiently important to change the overall assessment.

We cannot rule out the possibility that people feel bullied to aggregate incommensurables when they are asked the question about their life satisfaction. But could it not instead be the case that denying the possibility of such aggregating, even in the face of people's ability and willingness to do it (and familiarity with doing it in all aspects of life), is a sort of bullying in its own right? Nussbaum might view this sort of aggregating as absurd and nonsensical, but that is not necessarily a view shared by those who answer the survey questions. Their choice to give an answer¹¹¹ admittedly does not prove that they view the question as legitimate, but it is at least a piece of evidence in favor of that conclusion. In contrast, there is no evidence that those surveyed think the question is illegitimate.¹¹²

2. Bad Pleasures

Nussbaum notes that "pleasure is simply not normatively reliable."¹¹³ For example, "Rich people have pleasure in being ever richer and lording it over others, but this hardly shows that redistributive taxation is incorrect. Racists have pleasure in their racism, sexists in their sexism."¹¹⁴ She goes on to point out that certain economists have constrained their welfarism by excluding from the welfare calculus these sorts of pleasures.¹¹⁵

We agree, of course, that redistributive taxation is not shown to be incorrect by the point that rich people take pleasure in being ever richer. It is necessary, however, to keep separate these two questions: (1) whether redistributive taxation improves the life of an individual rich person; and (2) whether such taxation is a good policy for society as a whole. The answer to (2) could be yes even if the answer to (1) were no. One reason for this possible divergence is that redistributive taxation may well increase the pleasure of the poor; indeed, decreasing marginal utility and other considerations could make such taxation

111. And indeed almost everyone surveyed chooses to respond. Response rates for happiness questions on social surveys often exceed 95%, substantially higher than (for example) those for reported income. See, e.g., Bernard M.S. van Praag & Barbara E. Baarsma, *Using Happiness Surveys to Value Intangibles*, 115 *ECON. J.* 224, 230 (2005) (reporting a 96.1% response rate for a general quality of life question among respondents to a survey where responses to other questions were substantially lower).

112. Nussbaum's further point—that the question about life satisfaction contains an ambiguity—could be addressed by splitting it into two or more different questions. We leave the methodology to the psychologists, but as a rough example, one question could ask how happy the subject is with her life, and another could ask how she would judge or evaluate her life. In any event, we favor moment-to-moment measures of happiness over questions about life satisfaction, as discussed in Parts I and IV.

113. Nussbaum, *supra* note 93, at S96.

114. *Id.*

115. *Id.* Adler and Posner are among this group of welfarists, as we discuss at length in Part III.

benefit the poor more than it harms the rich. Another reason is that there could be moral considerations independent from welfare that support such taxation. Moreover, even the answer to (1) could be yes: the rich might not, on the whole, actually benefit from the absence of redistribution.

But if a rich person were indeed made happier on the whole by the absence of redistributive taxation, then that rich person's welfare would be increased by such an absence. This sort of increase in welfare would likely be outweighed (from the perspective of policymaking) by other considerations, including the effect on the welfare of others. But it would be inaccurate to characterize the negative effects of low taxation as eliminating the welfare enhancement such a policy bestows on the rich person. If that person is made happier by the policy, then she is made better off by it. *Her* well-being is conceptually distinct from the well-being of others (if only because others' well-being, by hypothesis, has no effect on her happiness in this example) or from moral considerations that are independent of welfare.

The same analysis applies to racists, sexists, and homophobes. Nussbaum writes that "[t]o some people, the distress caused by the presence of a homosexual couple next door is just as acute as the distress caused by the presence of a running sewer next door."¹¹⁶ We cannot stress strongly enough that we oppose policies catering to these sorts of discriminatory preferences. As a starting point, we are not even certain that those who harbor those preferences really are made happier by the bitterness and intolerance embodied therein. But even if those people were made happier, we are convinced that their happiness is outweighed by the reduction in happiness that discriminatory policies impose on others. And even if *that* were not true, moral arguments unrelated to welfare could still be made against such policies. As with the point about taxation, the best policy for society may well be one that reduces the welfare of some individuals within it. Notwithstanding all of these caveats, though, it remains true that if a homophobe really were made happier on the whole by a policy banning a homosexual couple from living next door, then that homophobe's welfare would be increased by such a policy. At least as a matter of analytical truth, racism can increase a racist's welfare. The project of opposing discrimination does not depend on mischaracterizing welfare.¹¹⁷

3. Good Pains

Nussbaum also emphasizes that "some valuable activities are not accompanied by pleasure"¹¹⁸ and that the absence of negative emotion can lead people to

116. *Id.* at S107–08.

117. We note that this may not be a point of disagreement with Nussbaum. She argues, as do we, that honoring discriminatory preferences is undesirable. And she notes that John Stuart Mill and John Harsanyi do not count such preferences as welfare. *Id.* at S96–97. But she herself does not commit to the view that welfare excludes those preferences.

118. *Id.* at S97.

be insensitive and even aggressive toward others.¹¹⁹ These claims are compatible with ours. An activity like “fac[ing] death in battle for the sake of a noble end”¹²⁰ might be valuable notwithstanding its failure to increase the welfare of the actor. Its value could come from increasing others’ welfare or perhaps from some other source. And if it is true that a shortage of negative emotion can make people insensitive or aggressive, then that could count in favor of a degree of negative emotion. Insensitivity or aggressiveness almost certainly will decrease others’ welfare (we suspect they will also result in decreased welfare for the actor herself, directly or indirectly) and may be morally problematic for independent reasons as well.¹²¹

Our argument is not that we should root out all unpleasant emotion, regardless of the consequences. It is simply that unpleasant emotion, all else being equal, constitutes a decrease in happiness (and therefore in welfare) for the person experiencing the emotion. Such unpleasantness might be necessary to achieve all sorts of ends, including even the maximization of long-term happiness for the individual in question. But when we bracket those considerations and stipulate that the emotion really does make the person feel worse overall, we are left with the fact that the unpleasantness is bad for the person who experiences it.¹²²

4. The Relationship Between Welfare and Living a Good Life

Just as risking death for a noble end might be valuable even though it decreases the welfare of the one who does it, choosing a risky or difficult career path might be valuable. Nussbaum applauds those who make such sacrifices,¹²³ and so do we. But a difference between our view and hers emerges if Nussbaum is taken to characterize such sacrifice as necessarily welfare-enhancing for the risk-taker: “Public policy should make room for, and honor, commitments that are in their very nature fraught with risk, pain, and difficulty, especially commitments to fighting for social justice, as not optional but mandatory parts . . . of the good life of any human being.”¹²⁴

Our take on this statement is probably clear from what has gone before. In no way do we deny the value of altruism: it typically increases others’ welfare and

119. *Id.* at S97–99.

120. *Id.* at S97.

121. Similarly, negative emotions like fear can have value in that they may well increase the ultimate happiness of the person who has them, as well as that of other people (for example, by promoting behavior that avoids danger and prolongs life). *Cf. id.* at S94 (“Can one imagine a struggle for justice that was not fueled by justified anger? Can one imagine a decent society that is not held together by compassion for suffering?”).

122. Although much is often made of the benefits associated with painful or unpleasant experiences, empirical studies consistently show that experiencing positive effects improves people’s mental and physical health, enhances creativity, and makes them more open to new experiences. See ED DIENER & ROBERT BISWAS-DIENER, HAPPINESS 27–87 (2008); Barbara L. Frederickson, *Promoting Positive Affect*, in THE SCIENCE OF SUBJECTIVE WELL-BEING, *supra* note 40, at 449, 449–52.

123. Nussbaum, *supra* note 93, at S101–03.

124. *Id.* at S103.

may also have welfare-unrelated moral worth. Moreover, we think that other-regarding behavior often increases the happiness of the person who engages in it.¹²⁵ But altruistic behavior does not increase the welfare of the altruist unless it makes the altruist happier (whether it be directly or indirectly, in the short term or the long term). We take no position on what constitutes a “good life” in some objective sense, but if altruistic acts make a given person feel worse overall, then those acts detract from her welfare. Others may gain, but she loses. In terms of individual well-being, accepting pain and difficulty in the service of justice is not a mandatory part of the good life of every human being.

Like altruism, other acts valued by Nussbaum are unrelated to welfare unless they increase happiness. Nussbaum cites widespread agreement that

a life with feeling alone and no action is impoverished. . . . [A] person who sits around doing nothing, or even just counting blades of grass, or a person plugged into Robert Nozick’s experience machine that generates pleasant experiences, is not living a life of the sort we should try to promote, however pleased that person feels.¹²⁶

Assume for the sake of argument that two people both genuinely enjoy lazing around and are made genuinely displeased by being active. One of them, *A*, chooses to spend her life lazing; the other, *B*, chooses to spend it in active pursuits that Nussbaum finds admirable. *A* has a happier life—a life of greater welfare—than *B*. If Nussbaum would deny this, then her conception of welfare is insufficiently attentive to the differences among individuals.¹²⁷

5. Feeling or Judgment?

A proponent of a rival account of welfare might argue that although virtuous activity need not create pleasurable feeling, it will be *judged* valuable by the person who engages in it. Nussbaum emphasizes this distinction between feeling and judgment in the context of critiquing the psychological surveys used to measure subjective well-being.¹²⁸ It is worth taking a moment to address the possibility that subjective judgment of the value of an activity or of one’s life constitutes happiness. We also refer the reader to our discussion of this issue in section I.D.2.

In large measure, we consider such a possibility to be consistent with our

125. See, e.g., MARTIN E. P. SELIGMAN, *AUTHENTIC HAPPINESS: USING THE NEW POSITIVE PSYCHOLOGY TO REALIZE YOUR POTENTIAL FOR LASTING FULFILLMENT* 8–9 (2002).

126. Nussbaum, *supra* note 93, at S100; see also NOZICK, *supra* note 94.

127. It could be argued that activity tends to give people more positive feeling than does inactivity, but this is simply an empirical question on which we would be willing to accept whatever credible evidence emerges. See Sonja Lyubomirsky et al., *The Benefits of Frequent Positive Affect: Does Happiness Lead to Success?*, 131 *PSYCHOL. BULL.* 803, 826 (“[E]mpirical evidence suggests that individuals high in trait positive affect, happiness, or satisfaction tend to be more social, active, and energetic.”).

128. See Nussbaum, *supra* note 93, at S86–88.

mental-state approach. If a skier deems her skiing a valuable activity, that judgment is itself an internal positive feeling. Making judgments about the value of one's life is a cognitive act imbued with an emotional state in the same way that meditation, philosophizing, and remembering are. When people judge their own acts to be good, they are made happy by that judgment—according to our definition of happiness. A person feels good when she decides that she is doing the right thing or living the right way.

Our only caveat is that such judgment is only one type of good feeling and therefore only one way in which to be happy. Imagine a person who works during the day to stop violations of civil rights, then spends the night playing video games. If he judges only the work to be valuable but enjoys the games notwithstanding his intellectual judgment that they are devoid of value, then he derives happiness both from the positive judgment of the work and from the enjoyment of the games.

The qualities and behaviors valued by many of those who reject a purely hedonic conception of welfare—such as courage, reflection, temperance, commitment to justice, and willingness to sacrifice for others, etc.—are widely regarded as positive attributes. But why do we view them as positive? The reason might be moral and deontological: wholly separate from considerations of welfare. The reason might also involve the fact that when one person exhibits those qualities, she often increases the welfare of others. Finally, the reason might include the idea that those qualities can make the person who possesses them happier.

All of those reasons may be important, but only the last one relates to the welfare of the individual possessing the traits. To the extent that objectivist theories offer accounts of well-being, they often conflate an individual's well-being with other values. The mental-state account, by contrast, focuses on what well-being really is—positive sensory experience of the world. If an individual benefits from being courageous, she benefits in that her courage makes her feel better than she would have felt otherwise. We believe that the mental-state approach is a plausible alternative version of welfare, and that it can withstand the criticisms leveled against it by proponents of objective accounts. But even if it does not, subjective well-being almost certainly forms a substantial component of human welfare—perhaps the dominant component. Even a committed objectivist should thus find valuable the decision tool we outline in Part IV.

III. SUBJECTIVE WELL-BEING AS LAUNDERED PREFERENCES

Most scholars who would not define welfare in objective terms would instead define it as satisfying one's preferences. This preference-based theory of welfare has long held sway among economists and recently received its most robust theoretical defense from Matthew Adler and Eric Posner. In this Part we analyze the arguments typically made by adherents of the preference-based theory against hedonic conceptions of well-being and illustrate that the former are unavailing. We then suggest that a refined conception of preferences ultimately

collapses into a subjective theory of well-being. Indeed, the two may be one and the same.

A. A PREFERENCE-BASED THEORY OF WELFARE

The leading theory of welfare, to which economists of various stripes have long subscribed, locates welfare within an individual's set of preferences. Imagine a person P who has a choice between outcomes (or "states") O_1 and O_2 . An individual has greater welfare in state O_2 than in state O_1 if and only if she actually prefers O_2 to O_1 . Put another way, an individual's welfare increases as she is able to satisfy her preferences to move from state O_n to state O_{n+1} ; as the individual is able to satisfy more and more of her preferences and move to even more desirable states of being, her welfare increases accordingly.

1. Orthodox Welfarism

In classical economic terms, that an individual prefers O_2 to O_1 is both a necessary and sufficient condition for the individual to have greater welfare in state O_2 .¹²⁹ On the standard economic model, preferences are the alpha and omega of welfare. However, this straightforward view of preferences-as-welfare has received trenchant criticism from philosophers and some economists,¹³⁰ who make two principal objections. First, cognitive errors or a lack of information can lead someone to choose O_2 over O_1 even though, if she experienced each state, she would actually prefer O_1 .¹³¹ And second, individuals can hold preferences that are entirely remote from their own interactions with the world—preferences that, if satisfied, will not benefit the preference holder in any way because she will not even know they have been satisfied.¹³²

We take it to be clear that the first objection shows the superiority of the mental-state approach over orthodox welfarism. Suppose that Sally's parents surprise her by bringing home ice cream and that Sally hopes the flavor will be chocolate. Chocolate is her preference because she has forgotten that she actually enjoys the taste of vanilla more. Is she better off in O_1 , where her parents bring vanilla and she enjoys it more, or in O_2 , where they bring chocolate and she enjoys it less? We think it evident that she is better off in

129. ADLER & POSNER, *supra* note 15, at 33; Matthew D. Adler & Eric A. Posner, *Rethinking Cost-Benefit Analysis*, 109 YALE L. J. 165, 191 (1999) ("Modern economists hold that utility refers to the extent to which a person satisfies his or her (unrestricted) preferences.") [hereinafter Adler & Posner, *Rethinking Cost-Benefit Analysis*]; J.R. Hicks, *The Foundations of Welfare Economics*, 49 ECON. J. 696, 698 (1939) ("We assume each individual . . . to have a certain scale of preferences, and to regulate his activities in such a way as best to satisfy those preferences.").

130. Useful treatments include DANIEL M. HAUSMAN & MICHAEL S. MCPHERSON, *ECONOMIC ANALYSIS AND MORAL PHILOSOPHY* (1996), L.W. SUMNER, *WELFARE, HAPPINESS, AND ETHICS* 113–37 (1996), and Tyler Cowen, *The Scope and Limits of Preference Sovereignty*, 9 ECON. & PHIL. 253 (1993).

131. See ADLER & POSNER, *supra* note 15, at 33 ("[I]t seems quite plausible that people can prefer states that do not improve their welfare because their preferences are evil, ignorant, adaptive, or otherwise misshapen.").

132. See *id.* at 34.

O_1 .¹³³

It would be possible to craft a preference-based view that conceded this point while still denying the validity of the second objection. On such a view, welfare would be defined by the satisfaction of preferences that either increased subjective well-being or had no effect on subjective well-being. But for the reasons that we articulate throughout this Article, the pure mental-state approach better captures what is commonly meant by well-being than does that hybrid preference approach. If Sally were asked whether she would prefer O_1 (a state of things in which there would be peace on Earth in the year 2200) or O_2 (in which there would be war in 2200), she might well choose O_1 , all else being equal. If Sally dies in 2015, does it increase her welfare if in fact there is peace in 2200? Some philosophers, such as Griffin, have argued along these lines, but we think such a claim is untenable.¹³⁴ The same could be said for states of the world that accord with Sally's preferences while she is alive but that she is unaware of.¹³⁵

We will give no more attention to the orthodox approach because it has no means, in our view, to defend itself against such objections. We turn our attention for the rest of this Part, therefore, to a more sophisticated version of preference-based welfarism.

2. Refined Preference-Based Welfarism

To overcome the two foregoing objections to orthodox welfarism, a number of scholars have advanced a more refined preference-based account of welfare. James Griffin is one of the earliest and most significant contributors to this movement.¹³⁶ More recently, Matthew Adler and Eric Posner have done some of the most influential recent work in this vein. We focus principally on their approach, which largely subsumes the contributions made by Griffin and others. In response to the first objection to orthodox welfare, Adler and Posner classify evil, ignorant, adaptive, or otherwise misshapen preferences (which may be based upon imperfect information, cognitive biases, or simply sadistic tendencies) as “nonideal,” and they propose to launder them—to remove them from the welfare calculus or correct the inaccurate information upon which they are based.¹³⁷

Adler and Posner's treatment of the second objection—the possibility of “remote” preferences that do not affect the preference holder—is somewhat

133. The only advantage of O_2 is that she might be made happy merely by seeing that chocolate was brought home (and disappointed by seeing vanilla). This sort of advantage is counted by the mental-state account but not by the preference-based account.

134. GRIFFIN, *supra* note 4, at 22–23. That events after death cannot affect welfare is a widely shared intuition among economists. *See, e.g.*, ADLER & POSNER, *supra* note 15, at 35; SUMNER, *supra* note 130, at 126–27.

135. This point receives extensive treatment in the next section in the form of the Sri Lankan squirrel example.

136. GRIFFIN, *supra* note 4, ch. II. For other preferentialist accounts of welfare see V.J. MCGILL, *THE IDEA OF HAPPINESS* (1967); Wayne Davis, *A Theory of Happiness*, 18 AM. PHIL. Q. 111 (1981).

137. Adler & Posner, *supra* note 92, at S257.

more involved. They provide a number of illustrative examples, one of which concerns the endangered Sri Lankan squirrel and an environmentally conscious American named Sheila.¹³⁸ Imagine that the squirrel is teetering on the brink of extinction. Sheila may well prefer the state of the world in which the squirrel does not become extinct; in the abstract, what environmentally conscious person would not? But if she never visits Sri Lanka, never studies the squirrel, never sees it in captivity, and—this point is crucial—never learns that the squirrel has survived, it is difficult to see how the squirrel’s continued existence increases her own welfare. Adler and Posner would launder these preferences from the welfare calculus as insufficiently self-interested, in that they do not appear to benefit the preference holder directly.¹³⁹ The result is a set of necessary conditions for increases in human welfare: the individual must prefer state O_2 to state O_1 ; her preference must be idealized, in the sense of being based upon full information, not subject to cognitive biases, and not “evil”; and the preference must be self-interested, such that its fulfillment will actually benefit the holder directly.¹⁴⁰

We agree that conventional preference-based accounts of welfare are flawed, and we believe that Adler and Posner’s theoretical modifications—the laundering of non-ideal or non-self-interested preferences—are indeed necessary if the preference-based account is to gain any purchase. But we believe that the laundered preference-based account of welfare proves both more and less than its proponents claim.

B. THE PREFERENCE-BASED CASE AGAINST SUBJECTIVE WELL-BEING

The preference-based case against a subjective well-being account of welfare is primarily a negative one. Its proponents acknowledge that subjective well-being forms a significant part of individual welfare.¹⁴¹ After all, individuals undoubtedly gauge their welfare to a substantial degree by their own happiness, and presumably a large proportion of the preferences that people seek to satisfy are designed to increase happiness and subjective satisfaction.¹⁴² Nevertheless, Adler and Posner argue that there must be more to welfare than happiness. They offer a number of arguments based upon classic philosophical thought experiments, many of which take the following form: Adler and Posner posit two

138. ADLER & POSNER, *supra* note 15, at 34.

139. *Id.* at 36–37.

140. Griffin imposes the same condition of fully informed preferences, GRIFFIN, *supra* note 4, ch. II, though he does not place the same emphasis on self-interested preferences. Thus, he cannot respond to the criticisms of non-self-interested accounts that are now widely viewed as persuasive and that motivated Adler and Posner’s subsequent efforts. It is in that respect (among others) that we believe Adler and Posner’s account is the more advanced.

141. *E.g.*, Adler & Posner, *supra* note 92, at S254.

142. See Gary S. Becker, *Nobel Lecture: The Economic Way of Looking at Behavior*, 101 J. POL. ECON. 385, 386 (1993) (“[I]ndividuals maximize welfare as they conceive it”); see also Kahneman & Thaler, *supra* note 48, at 222 (noting that although people typically attempt to maximize their subjective well-being, they often fail to accurately predict future hedonic effects).

people with subjectively equivalent mental states and argue that one of those two people must have greater welfare than the other based upon some objective consideration external to the person's state of mind. (Their most prominent example is Nozick's "experience machine.")¹⁴³ Accordingly, they conclude, welfare must have components beyond purely subjective happiness. It is through this opening that Adler and Posner drive their preference-based theory.

Because these arguments against subjective well-being are similarly relevant to objectivist accounts of welfare, we have already considered and rejected most of them in section II.C. Nonetheless, a few of Adler and Posner's arguments warrant extended discussion here. The first is the case of the Deceived Scholar.

Adler and Posner imagine a person who wishes to achieve a reputation as a great scholar and to be treated as one by friends and colleagues. In state O_2 that person is indeed a scholar of great rank and esteem; in state O_1 that person is the subject of a massive trick, an academic version of *The Truman Show*, in which his colleagues and friends lead him to believe that he is a great scholar while secretly harboring the knowledge that his scholarship is second-rate.¹⁴⁴ The scholar's subjective mental states are equivalent in O_1 and O_2 , and yet surely, Adler and Posner argue, his welfare must be greater in O_2 , where his colleagues' feelings are genuine. Sumner employs a similar example to defend an account of welfare based on "authentic happiness," essentially an "informed preferences" version of subjective well-being.¹⁴⁵

This is the objective theorist's "Example 1" (the cuckolded husband) in variant form. Again, the example has undeniable intuitive force, but it has such force primarily because of our tendency to disbelieve its hypothetical terms. We cannot bring ourselves to accept that the scholar's subjective experience is actually the same in O_1 as it is in O_2 . He must occasionally catch his colleagues snickering behind his back and wonder what has caused them to laugh; his papers must be rejected by leading journals or top conferences more than someone in his position would expect, forcing him to confront his own creeping self-doubt; or, at minimum, he must receive concocted platitudes from his "adoring" colleagues that somehow lack the authenticity of true warmth. Our intuition simply recoils at the notion that the Deceived Scholar could be so perfectly deceived.

But what if he is? What if, in his own mind, he is living the life of a truly esteemed scholar in all of its particulars? Moreover, what if an outside observer, privy only to the Deceived Scholar's interactions with the world (and not the private information held by his contemptuous colleagues), were unable to distinguish his life from the life of a genuine luminary? The Deceived Scholar might be lacking in other respects, but how could it be said that his *welfare* is

143. ADLER & POSNER, *supra* note 15, at 30–31; *see also* GRIFFIN, *supra* note 4, ch. I; SUMNER, *supra* note 8, at 81–91; *supra* section II.B.

144. ADLER & POSNER, *supra* note 15, at 30.

145. SUMNER, *supra* note 8, at 172.

any lower than that of the true academic star? After all, by hypothesis their lives are indistinguishable; he is equally well off in every imaginable respect in both situations. No welfare-based grounds exist for choosing between the two.

Moreover, Adler and Posner's view of "remote" preferences—for instance, Sheila's preference that the squirrel survive—directly contradicts their position on the Deceived Scholar. The scholar is no different from Sheila, the environmentalist concerned about the Sri Lankan squirrel. Sheila would prefer that the squirrel continue to exist, just as any scholar, given the choice, would prefer a legitimately first-rate reputation. Adler and Posner hold that Sheila's welfare would be unaffected if the squirrel were to become extinct without it ever coming to Sheila's attention or affecting her life, because her preference is not self-interested. The squirrel's existence or lack thereof is simply an objective fact in the world that does not interact with Sheila and therefore cannot affect her well-being, on Adler and Posner's own view (and ours). So too for the scholar: if his cognitive and emotional lives in states O_1 and O_2 are identical, then his preference for O_2 cannot be self-interested. Given the parameters of the example, his reputation is simply an objective fact in the world that in no way affects his life. The examples of Sheila and the scholar show that people can have preferences for things that do not affect their lives and thus do not affect their welfare. Such preferences could be the result of an interest in others' welfare, or welfare-unrelated moral considerations, or a mistaken belief that the preferred thing will increase the person's own welfare. Either way, the example of Sheila is identical to that of the deceived scholar. Adler and Posner's position renders untenable their argument against subjective well-being.

Adler and Posner's other examples are no more availing. They write that an individual "may prefer not to be exposed to a toxin" even if that person perceives no risk from the toxin.¹⁴⁶ But of course the preference for avoiding this risk stems from the possibility that the individual will eventually suffer substantial harm—harm that carries a hedonic penalty—from this exposure. If the "toxin" in fact involved zero risk and the individual were unaware of her exposure to it, then the individual would be no better off for having avoided it. Similarly, they note that "an individual might strongly prefer not to become physically disabled, even though she recognizes that those who become physically disabled tend to adapt and return to their pre-disability level of happiness."¹⁴⁷ As a factual matter, this claim is not quite correct—people who become disabled typically recover only half (or less) of their lost subjective well-being.¹⁴⁸ Even if it were true, these individuals would still suffer lost well-being during the period of adaptation (which lasts for two years or

146. ADLER & POSNER, *supra* note 15, at 31.

147. *Id.*

148. See Bronsteen, Buccafusco & Masur, *Adaptation and Settlement*, *supra* note 1, at 1529 (summarizing findings of a study asking individuals suffering disability to report their well-being over time).

more).¹⁴⁹ Any self-interested individual would rationally wish to avoid disability. And if disability actually had no negative effect on a person's subjective well-being, then the preference to avoid it would be based on mistaken assumptions and thus subject to the laundering that Adler and Posner themselves impose.

Finally, Adler and Posner note that "an individual's happiness is substantially, if not exclusively, a matter of her basic disposition—that many of the things individuals care about and strive for do not affect mental well-being very much."¹⁵⁰ This is, of course, one of the most significant and counter-intuitive findings of hedonic psychology (though the "if not exclusively" suggestion is somewhat overstated).¹⁵¹ Yet it is not clear why it should constitute an argument against a hedonic conception of welfare. Adler and Posner recognize that individuals frequently concern themselves with outcomes that do not affect them personally—for example, Sheila and the Sri Lankan squirrel.¹⁵² They do not, however, treat the existence of these disinterested preferences as an argument against a preference-based account of welfare. Rather, they simply launder them from the calculus. Moreover, there is every indication that when individuals "care about and strive for" things, they often mistakenly believe that these things will make them happy. The prevalence of such failures of affective forecasting is another of the most striking and important findings of hedonic psychology.¹⁵³ Were individuals able to predict their own future mental states accurately, their preferences might change quite dramatically. We return to this point in detail in the section that follows.

In sum, Adler and Posner's objections to a subjective account of welfare cannot bear the weight placed upon them. Having acknowledged that subjective well-being comprises a substantial portion of individual welfare, they assert that welfare must entail more than mere hedonic mental states. But their examples and arguments do not support that assertion.

C. THE HEDONIC FOUNDATION OF LAUNDERED PREFERENCES

As we explained in the preceding section, attempts to demonstrate space between preference-based and hedonic accounts of welfare founder on preferentists' own arguments against remote preferences. This is indicative of a deeper connection between the two theories: the laundered preference theory of welfare

149. *See id.* at 1529, 1537–38.

150. ADLER & POSNER, *supra* note 15, at 31.

151. *See* Diener, *supra* note 52, at 494–96 ("Myth 1: Happiness Has an Unchanging Individual 'Setpoint' Substantial evidence now indicates that the extreme setpoint theory, in which circumstances do not matter in the long run, is untenable."); Sonja Lyubomirsky et al., *Pursuing Happiness: The Architecture of Sustainable Change*, 9 REV. GEN. PSYCHOL. 111, 116 (2005) (summarizing studies concluding that approximately 50% of happiness variation is based on genetics, 10% on life circumstances, and 40% on the consequences of intentional activity).

152. These are not idle preferences either. People give millions of dollars each year to protect species and habitats that they will never visit and whose continued existence they will not monitor.

153. *See supra* notes 75–79 and accompanying text.

may reduce to a purely subjective hedonic account.¹⁵⁴ In other words, it is possible that the two are isomorphic—identical. The “thing” for which an individual possesses self-interested preferences is her own hedonic well-being.¹⁵⁵

1. Preference Laundering and End Objectives

One of the most interesting and important features of Adler and Posner’s argument for a preference-based account of welfare is its emphasis on laundering individual preferences. Preferences can be easily distorted by a lack of information; for example, an individual might prefer one outcome to another without understanding the full ramifications of that preference or without being able to predict accurately what impact the satisfaction of that preference will have upon her life.¹⁵⁶ As a theoretical matter, Griffin, Adler and Posner, and a number of other scholars suggest that these preferences, along with “disinterested” preferences (Sheila and the Sri Lankan squirrel),¹⁵⁷ should be recalibrated to reflect what their holders would in fact prefer in the presence of full information.¹⁵⁸ Their innovative theory is based upon a counterfactual scenario in which a rational, self-interested citizenry acts in the presence of complete information.¹⁵⁹

The laundering of preferences reveals that this conception of welfare is one of ends, not means. There is not an approach in which the individual’s capacity to satisfy her preferences is the measure of that individual’s welfare. Nor is it a theory of “decision utility,” in which an individual’s decision itself (the satisfied preference) is treated as the unassailable measure of welfare.¹⁶⁰ Rather, the

154. Adler and Posner suggest that subjective well-being might someday be understood as the proper measure of welfare: “At the end of the day, we may conclude—after normative argument—that well-being reduces to SWB. But to define them as equivalent at the outset just cuts short this debate by definitional fiat.” Adler & Posner, *supra* note 92, at S260. It is that normative argument that we attempt to supply here.

155. In this regard we follow the example set by George Stigler and Gary Becker, who argued that consumers have preferences at a high level of generality for a few basic pleasures. George J. Stigler & Gary S. Becker, *De Gustibus Non Est Disputandum*, 67 AM. ECON. REV. 76 (1977); see also Richard H. McAdams, *Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination*, 108 HARV. L. REV. 1003, 1043 (1995) (discussing Stigler and Becker’s position).

156. See ADLER & POSNER, *supra* note 15, at 36. Adler and Posner offer the example of a person who supports the building of a new dam, knowing that it will reduce the price of electricity, but without realizing that the “noise and commotion from construction of the dam” will interfere with her enjoyment of her vacation home. *Id.* at 124.

157. In addition, they suggest discounting “objectively bad” preferences, such as sadistic inclinations or preferences for social disorder. See *id.* at 138–40. This decision may raise additional issues regarding Adler and Posner’s approach, but those questions are unimportant to our current argument, and we leave them for another day.

158. See *id.* at 36–37. As a practical matter, Adler and Posner advise agencies and other governmental actors to tread carefully before actively discarding and reimagining the preferences of their citizens. The reason, however, is purely epistemic (and based upon the decision costs of undertaking a wholesale preference reordering). See *id.* at 136–38.

159. *E.g.*, Adler & Posner, *supra* note 92, at S257.

160. See Kahneman & Thaler, *supra* note 48, at 221.

individual is understood to have a set of self-interested objectives, and the satisfaction of preferences is the manner by which she advances toward those objectives—from O_1 to O_2 to O_3 , and so forth.¹⁶¹ Preferences that do not allow an individual to make progress toward fulfilling her objectives are not truly welfare-enhancing on this view.

In light of this approach, the preference-based account of welfare demands a laundering not only of uninformed preferences, but also of any preference influenced by any sub-rational judgment or any systematic failure of forecasting. Consider, for example, a nervous consumer who fears a 1 in 100 million chance of dying from salmonella-infected spinach and chooses to purchase iceberg lettuce instead. If that consumer has simply improperly gauged the import of a 1 in 100 million risk¹⁶²—failing to realize, for example, that it is orders of magnitude smaller than the risk to life from driving to the supermarket to purchase the lettuce—or overrated the risk due to salience bias, then his preference should be laundered to reflect his true feelings were he capable of correctly assessing the relevant risks.¹⁶³ Or imagine a worker who chooses to move from a small downtown condominium to a larger house in the suburbs, believing that he will not mind the additional commute. If he is incorrect and if the time spent in his car will in fact bring him great unhappiness, then his preferences should be similarly laundered to reflect his true choices absent this forecasting error. Optimism biases,¹⁶⁴ hindsight biases,¹⁶⁵ salience biases,¹⁶⁶ status quo biases,¹⁶⁷ low-probability miscalculations,¹⁶⁸ framing and anchoring effects,¹⁶⁹ and other sorts of cognitive errors—along with affective forecasting errors, focusing illusions, and other types of hedonic misapprehensions¹⁷⁰—must all be laundered to produce an individual's idealized set of preferences.

161. Adler and Posner characterize their own view as “a kind of preferentialism about well-being.” ADLER & POSNER, *supra* note 15, at 198 n.28.

162. Jonathan S. Masur, *Probability Thresholds*, 92 IOWA L. REV. 1293, 1333 (2007) (describing the tendency to overestimate the importance of low-probability events).

163. See ADLER & POSNER, *supra* note 15, at 147 (“[C]ognitive biases drive a wedge between preference satisfaction and well-being.”).

164. See generally Neil D. Weinstein, *Unrealistic Optimism About Future Life Events*, 39 J. PERSONALITY & SOC. PSYCHOL. 806, 806 (1980) (“Various data suggest that people . . . tend to be unrealistically optimistic about the future.”).

165. See generally Baruch Fischhoff, *Hindsight ≠ Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty*, 1 J. EXPERIMENTAL PSYCHOL. HUM. PERCEPTION & PERFORMANCE 288 (1975).

166. See Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1127 (1974).

167. See William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7 (1988) (discussing the preference of many, when faced with a decision, to do nothing and maintain the status quo); see also Richard Thaler, *Toward a Positive Theory of Consumer Choice*, 1 J. ECON. BEHAV. & ORG. 39, 43–46 (1980) (discussing “endowment effects” more specifically).

168. Masur, *supra* note 162, at 1331–37.

169. See Tversky & Kahneman, *supra* note 166, at 1128–30. See generally Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, 59 J. BUS. S251 (1986).

170. See *supra* notes 75–79 and accompanying text.

2. Preferences for What?

The result of this extensive laundering process is a rational,¹⁷¹ self-interested, idealized individual—one who has in mind a set of personal objectives and formulates preferences accurately designed to achieve those objectives. But on this account, what sorts of objectives might such a person possess? We believe that under the restricted preferences framework, there is only one option.

Consider the case of the Driven Scholar—a colleague of our Deceived Scholar. Ten years into his career at a prestigious university, the Driven Scholar is faced with a choice: he can sustain himself as a reasonably productive researcher, spend significant leisure time with his wife—a busy professional herself—and their two young children, and generally lead a satisfying and happy life (Path *A*); or he can devote himself body-and-soul to his work, slowly lose contact with his devoted family, but achieve great scientific breakthroughs, an eventual Nobel Prize, and widespread acclaim (Path *B*). Suppose, however, that the Scholar—endowed with full information and stripped of affective forecasting errors—understands that Path *B* will not bring him happiness. Thirty years later, blessed with a Nobel Prize but estranged from his family, he will take less pleasure in life and view his life as ultimately less satisfying than he would have if he had accepted a more modest career in exchange for the lasting company of his family. Fame and recognition have fleeting hedonic consequences; marriage and social ties are far more important to an individual's subjective well-being.¹⁷²

We can say two things about this hypothetical. First, few people—maybe no one—would prefer Path *B* as a means of maximizing their own well-being.¹⁷³ The contrary view is certainly tempting; the reader may feel herself immediately drawn to that choice. But it is critical to understand that the intuitive force of this hypothetical—and of the allure of the Nobel Prize—is the tendency to believe that there *must* be some additional hedonic benefit to be had from such a tremendous achievement, some satisfaction or fulfillment that the story does not capture. And that is precisely the point: individuals concerned only with their own welfare seek accomplishment and recognition because they believe that they will *feel* differently after they have achieved these objectives, not because of anything intrinsic to the objectives themselves. The objectives are instrumental.

Second, even if some hypothetical scholars with full information did in fact

171. Adler and Posner bracket the question of whether an idealized set of preferences should be understood to include full information—and by our argument, rationality—only up to an individual's cognitive limits, or whether we should envision an entirely informed human being. See ADLER & POSNER, *supra* note 15, at 38. For our purposes the difference is irrelevant. What matters is that the individual's preferences should be adjusted to some significant extent to reflect her actual objectives.

172. See Argyle, *supra* note 55, at 359–62.

173. They might prefer it for altruistic reasons involving the value to others of the scientific breakthroughs, but that (like the squirrel's survival) is not a part of *their* welfare beyond the extent to which they know about it and are made happy by it.

prefer Path *B* and the life of unhappy glory, they would be doing so despite the fact that satisfaction of that preference will not increase their welfare. That is to say, no rational, idealized, self-interested, welfarist individual, per Adler and Posner's account, could hold such a preference. The unhappy Nobel Laureate might possess greater prestige or greater moral character, or have contributed more to the betterment of society than the scholar who opts for family over career, but to say that he has greater well-being is to reject the conceptions of "self-interest" or "benefit" as preference-based theories employ them. What inherent value could success and fame, wealth, or the survival of the Sri Lankan squirrel hold for the self-interested welfare seeker if she does not experience and benefit from them at some subjective level?

That Adler and Posner's account relies on this restrictive notion of self-interest is a strength, not a weakness. Suppose one were to interpret their account differently. On this reading, a fully informed scholar could somehow actually prefer Path *B* (unhappy glory) and would therefore increase his welfare by satisfying that preference. This version of the preferentist account would not be isomorphic with our conception of welfare as happiness, but it would also be less successful at capturing our intuitions about the concept of well-being. Who seems better off, the scholar who satisfies his preference for fame yet is miserable all of the time, or the scholar who fails to satisfy that preference yet enjoys greatly his resulting family-centered life? We believe that the latter has greater well-being, and that a theory committed to the opposite conclusion could not overcome so strong a clash with people's intuitions and considered judgments.¹⁷⁴

This point warrants one final example. Consider the Noble Politician, who leads a country stricken by civil strife.¹⁷⁵ Much like the Driven Scholar, the Noble Politician is faced with a choice: she can elect to pursue a modest career and live a life of comfort and contentment (Path *A*), or she can devote herself to bringing peace to her violence-torn nation at great personal cost to herself (Path *B*). By following this latter path, the Noble Politician will accomplish great things on behalf of her fellow citizens; but as with the Driven Scholar, the former option will bring her greater individual happiness and satisfaction.

We have already addressed this example, in general form, in our discussion of the relationship between welfare and the "good life."¹⁷⁶ There, we were at pains to acknowledge that altruism is valuable due to its effect on others' subjective well-being and, perhaps, independently morally worthwhile as well. We expect—indeed, we hope—that many people would prefer the altruistic path. But that choice is not welfare-enhancing to the individual if it does not make the altruist happier—which, by hypothesis, it does not.

174. Cf. SUMNER, *supra* note 8, at 10 (describing the process of reasoning about welfare in similar terms).

175. We model this example after the life of John Hume, one of the architects of the Northern Ireland peace process, discussed in Nussbaum, *supra* note 93, at S101–03.

176. See *supra* section II.D.4.

Here, we go one step further. Like our subjective account of welfare, the restricted-preference framework would view a preference for the difficult, altruistic life as welfare-diminishing. Altruism, for all of its many virtues, is by definition not self-interested.¹⁷⁷ With altruism laundered from the calculation, Path A confers greater individual benefit upon the Noble Politician than Path B. Only a preference for Path A would survive the process of preference laundering. Here, as with the Driven Scholar, the requirement that preferences be both idealized and self-interested eliminates from the welfare calculus any preference that the individual will not herself experience as beneficial.

What, then, is left of the restricted-preferences account other than subjective well-being? The answer, we suggest, is nothing; the two are perfectly isomorphic. A self-interested, restricted theory of welfare demands that the individual actually receive some benefit before one can say that her welfare has increased;¹⁷⁸ this conception of “benefit” is rendered meaningless unless the individual actually *experiences* the benefit.¹⁷⁹ To claim otherwise—to argue that an individual’s welfare can improve without that improvement registering subjectively—is to welcome Sheila and her Sri Lankan squirrel back into the fold.

Individuals have many different types of preferences, including ones that are self-interested, altruistic, and mistaken. Yet the act of laundering those preferences to reflect only self-interest and perfect information plausibly reduces them to pure preferences for improvement in subjective well-being. Thus, it is possible that the sophisticated laundered-preference account of welfare is, at bottom, identical to the hedonic account we advance here.

IV. TOWARD WELL-BEING ANALYSIS

The preference-based theory of modern welfare economics has been so influential for so long in large part because it has generated a number of methods for translating the theory into policy-oriented practice. The most prominent example is the use of cost-benefit analysis (CBA) as a decision procedure to judge the likely effect of laws and policies on well-being. In the past half century, CBA has become the linchpin of the modern American administrative state,¹⁸⁰ and many scholars (including, prominently, Adler and Posner) have made considerable contributions toward refining both the theory

177. See Adler & Posner, *supra* note 92, at S257.

178. See ADLER & POSNER, *supra* note 15, at 34–36 (“The distinction between what goes on inside *P*’s head and what occurs outside is an attempt . . . to delineate the boundaries of *P*’s own life—to provide a noncircular characterization of just those outcomes that can make a welfare difference for *P*.”).

179. The argument is symmetric to Adler and Posner’s claim, in opposition to certain objective conceptions of welfare, that O_1 cannot be better for an individual’s welfare than O_2 if the individual never prefers O_1 to O_2 . *Id.* at 32. Similarly, it is unsound to speak of an increase in individual welfare that the individual never experiences as a gain in subjective well-being.

180. See, e.g., Exec. Order No. 12,866, Regulatory Planning and Review, 58 Fed. Reg. 51,735 (Sept. 30, 1993) (requiring agencies to conduct CBA prior to any regulatory action).

and practice of CBA.¹⁸¹

Cost-benefit analysis is based upon the principle that wealth is the best available proxy for welfare.¹⁸² If this were indeed the case, then CBA would be the most logical choice of governmental decision procedure. But it may be that welfare is better understood as subjective well-being, as we have argued here. There exist good proxies for subjective well-being that do not rely on measuring wealth. We thus believe that policymakers should consider supplementing or replacing cost-benefit analysis with a new decision procedure based on experienced well-being—well-being analysis (WBA).¹⁸³ The remainder of this paper takes the first steps toward describing and defending that procedure.¹⁸⁴ The science behind subjective well-being is still young, and our aim here is only to sketch the outlines of a decision tool that may at some point become as robust as CBA. But we believe that the practical and theoretical hurdles WBA will confront are no greater—and often much lower—than those that CBA faces. Indeed, WBA may hold advantages over CBA even on a *preferentist* account of welfare. Accordingly, even unconvinced preferentists who currently support CBA should find significant value in the development of WBA.

A. WELL-BEING ANALYSIS

1. A Procedural Sketch

The procedure of a future WBA will likely owe much to the techniques developed for CBA, and it will be helpful to describe briefly the latter in order

181. See ADLER & POSNER, *supra* note 15; RICHARD L. REVESZ & MICHAEL A. LIVERMORE, RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENT AND OUR HEALTH 12–13 (2008); CASS R. SUNSTEIN, THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION 6–10 (2002); Robert W. Hahn, *The Economic Analysis of Regulation: A Response to the Critics*, 71 U. CHI. L. REV. 1021, 1041–47 (2004); Jonathon S. Masur & Eric A. Posner, *Against Feasibility Analysis*, U. CHI. L. REV. (forthcoming 2010), available at <http://ssrn.com/abstract=1452984> (discussing flaws in the way CBA is currently practiced, suggesting corrective solutions, and arguing against the use of an alternative form of analysis).

182. See, e.g., Adler & Posner, *Rethinking Cost-Benefit Analysis*, *supra* note 129, at 174 (“[T]ext-book CBA will on average attach higher valuations to wealthier people because they can afford to pay more to reduce risk.”).

183. Adler and Posner themselves suggest such a move:

Of course, one could produce an alternative procedure that avoided dollars and instead used SWB [subjective well-being] units as the common metric. Then the dollar effects of projects would be transformed into SWB units rather than vice versa. There is no reason in principle why such an alternative would not be adequate in a world where the government advances SWB alone, but, as we have seen, researchers have not yet come up with a plausible SWB-based decision procedure.

Adler & Posner, *supra* note 92, at S287–88; see also Paul Dolan & Tessa Peasgood, *Measuring Well-Being for Public Policy: Preferences or Experiences?*, in LAW & HAPPINESS 5 (Eric A. Posner & Cass R. Sunstein eds., 2010). It is that plausible SWB-based decision procedure that we construct here.

184. For an example of another proposal for using reported well-being in public policy, see Alan B. Krueger et al., *National Time Accounting: The Currency of Life*, in MEASURING THE SUBJECTIVE WELL-BEING OF NATIONS: NATIONAL ACCOUNTS OF TIME USE AND WELL-BEING 9 (Alan B. Krueger ed., 2009).

to better understand the strengths of the former.¹⁸⁵ CBA, as its name suggests, is meant to compare the costs of some policy, law, or decision to the benefits that would accrue from it. When the benefits outweigh the costs, the policy should be implemented—at least insofar as the policymakers' goal is to increase welfare. While this seems straightforward enough for market-based transactions, it becomes substantially more complicated when the costs and benefits to be compared are qualitatively distinct. How, for example, should one compare the social and financial benefits of a new civic center with the environmental and psychological costs of increased traffic congestion? CBA's answer is monetization. Using contingent valuation (CV) surveys, economists attempt to gauge the amount of money that people would pay to receive the benefits and the amount of money they would pay to avoid the costs.¹⁸⁶ When the former exceeds the latter, the policy is assumed to be welfare maximizing.

As a theoretical matter this makes perfect sense. Research from behavioral economics and hedonic psychology, however, suggests that CBA faces significant empirical hurdles. As discussed above, when people are asked to make predictions about the effects of future experiences on their well-being, they tend to suffer from a number of cognitive and emotional biases.¹⁸⁷ Affective forecasting errors and cognitive heuristics drive a wedge between (*ex ante*) predicted well-being and (*ex post*) experienced well-being.¹⁸⁸ The attractiveness of WBA is based on the tighter link between subjectively reported well-being and actual welfare. Whereas CBA must convert the costs and benefits of a proposed law or policy into discrete amounts of money, WBA relies on a closer proxy for well-being—subjectively reported data on moment-by-moment affect.¹⁸⁹ This is certainly an advantage if welfare is understood as subjective well-being. But even on a preferentist account, it may fare better than CBA. In the vast majority of cases, an individual will prefer what increases her subjective well-being. WBA will capture these situations, and thus may surpass wealth as a useful proxy for welfare. Accordingly, even the committed preferentist who remains unconvinced by our argument in Part III may have reason to prefer WBA to CBA.

We thus propose a decision procedure based upon the measurement of

185. For a robust description and defense of modern CBA, see ADLER & POSNER, *supra* note 15.

186. CV surveys ask a person how much she would be willing to pay (WTP) for some desirable outcome, such as the construction of a public park, or how much she would be willing to accept (WTA) in exchange for an undesirable one (for example, the destruction of the park). See ROBERT CAMERON MITCHELL & RICHARD T. CARSON, *USING SURVEYS TO VALUE PUBLIC GOODS: THE CONTINGENT VALUATION METHOD 2-3* (1989). Although theoretically equivalent, the way the question is framed substantially affects the valuation amount. See Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 NW. U. L. REV. 1227, 1231-42 (2003).

187. See *supra* notes 75-79 and accompanying text.

188. See Kahneman & Sugden, *supra* note 49, at 164-73.

189. To be clear, momentary affect is not a proxy for well-being; it is well-being. Yet although the experiences of momentary affect equate with well-being, the data that current survey methods generate can only serve as a proxy for it.

momentary affect associated with policy-relevant experiences. Governments would measure and quantify the likely hedonic effects of potential projects and policies and would make decisions based upon those projected effects. Rather than relying on wealth as a (weaker) proxy for welfare, WBA provides decision makers with direct information about the welfare consequences of a given proposal.

For example, a decision maker might begin by comparing the amount of time that people spend driving in traffic with their self-reported affect. If over the course of a day people who spend two hours in traffic report their affect as two points lower (on a seven-point scale)¹⁹⁰ than people who spend one hour in traffic, we can say that a second hour of driving in traffic results in the loss of 2 Well-Being Units (WBUs). A proposal, such as a tax incentive for urban rather than suburban living, that resulted in 1000 people taking an hour off of their two-hour commutes would have a benefit of 2000 WBUs. Of course, that same proposal might also diminish well-being because people would be living in smaller houses. Downsizing from a 2500 square-foot house to a 1500 square-foot house might result in daily reported well-being scores that are one point lower per person, leading to a loss of 1000 WBUs for the relevant population. On these data, the government should adopt the proposal (all else equal) because it creates a net benefit of 1000 WBUs.¹⁹¹

Using momentary affect measures like the ones discussed above, governments will be able to gauge the impact of manifold experiences on reported well-being and convert these scores into WBUs of various durations. If a government were able to anticipate all of the potential impacts of a project on individuals' well-being, it could compute the aggregate WBU gain or loss. Although predicting all of the well-being consequences of a law will be difficult, it can be enhanced by research focusing on the effects of similar measures. For example, the residents of a state might be surveyed both before and after the enactment of a law raising the minimum wage. If reported well-being improved when controlling for other possible sources of happiness, we could say that, at least as a matter of overall welfare, the bill was a success. We might then favor similar measures in the future. Studies of the impact of state-by-state adoption of no-fault divorce have already shown the value of such research.¹⁹²

The differences between CBA and WBA can be better illustrated through an example. Consider, for instance, a proposal for a dam across a major river. The dam, were it to be built, would produce a variety of different effects on the

190. This might be, for example, a scale like the one presented in Pavot, *supra* note 40, at 128.

191. A number of other costs and benefits would be involved in the calculation; we simplify the example for the sake of clarity.

192. See Betsey Stevenson & Justin Wolfers, *Bargaining in the Shadow of the Law: Divorce Laws and Family Distress*, 121 Q. J. ECON. 267, 267 (2006) (finding a 8%–16% decrease in female suicide, 30% decrease in domestic violence for both men and women, and 10% decrease in females murdered by their partners in states that adopt no-fault, or “unilateral,” divorce laws).

surrounding community. It would enable the production of electricity through turbines installed within the dam, reducing electricity prices for nearby consumers. It would help to control flooding of the river, benefiting local farmers and homeowners. At the same time, it would disrupt the migration of salmon along the river, effectively destroying the local fishing industry and forcing salmon fishermen either to move or find different jobs. Additionally, the lake formed by the dam would eliminate three of the four bridges crossing the river, resulting in increased traffic congestion and noise and decreased sleep for members of the community. Finally, the dam would diminish the value of the river as a recreational area.

Standard cost-benefit analysis would weigh the benefits of the dam (reduced electricity prices, flood control) against its costs (elimination of local fishing, increased traffic, recreational harm, and the cost of constructing the dam itself), all in monetary terms. The cost of the dam, the reduction in electricity prices, and the benefits of avoiding flooding are all typically measured in dollars and easily monetized. The cost of destroying the salmon fishing industry would most likely be measured in terms of its financial impact on the fishermen involved—the loss of income to them, mitigated by whatever they could earn in a different job. (The psychic benefit of having to give up a profession would most likely not be included.) CBA might attempt to monetize efficiency losses caused by traffic congestion, but noise and sleep issues would be harder to gauge. In order to determine the damage to the river's recreational value, the agency performing the CBA would rely on surveys asking residents how much money they would demand before being willing to accept the loss of the river as a recreational area. Having converted all of these values in dollars and cents, the agency would then compare costs and benefits.

The well-being analysis that we propose would also compare the costs and benefits of the proposed dam, but instead of comparing monetized values it would directly calculate and compare the ways that the dam would improve or diminish experienced well-being. Thus, while the CBA might conclude that saving thousands of people a few dollars on their utility bills would generate a substantial benefit, WBA would not likely detect any significant improvement in experienced happiness associated with the lower prices.

Perhaps more importantly, WBA is positioned to detect a number of costs associated with the dam that CBA might overlook entirely. Whereas CBA would count those unemployed by the destruction of the fishing industry simply as generating zero income, research on the hedonic implications of unemployment suggests that unemployment generates substantial decreases in well-being that persist for long periods of time even after the individual finds other employment.¹⁹³ Thus, while CBA would detect no cost if the unemployed fishermen found identically paying work in other professions, WBA would

193. See Richard E. Lucas et al., *Unemployment Alters the Set Point for Life Satisfaction*, 15 *PSYCHOL. SCI.* 8, 11 (2004); see also David A. Weisbach, *What Does Happiness Research Tell Us About*

indicate a considerable drop in happiness that lingered for many years. Similarly, the welfare effects on traffic, noise, and sleep caused by the reduction in bridges would likely be underappreciated or overlooked by traditional CBA, which tends to underestimate such costs. But hedonic psychology indicates that these three items have some of the strongest impacts on reported well-being of any environmental factors.¹⁹⁴

In this example at least, the differences between CBA and WBA are stark. Compared with their effects on actual experienced well-being, CBA is likely to overestimate the welfare benefits of the dam and underestimate its costs. In many cases, the different techniques will result in different policy outcomes.

Economists and psychologists have already learned a great deal about the hedonic consequences of various activities¹⁹⁵ and devised an ever-growing set of policy proposals based on those findings.¹⁹⁶ It is not unrealistic to believe that WBA may someday supplement or supplant CBA as the leading decision procedure.

2. Governmental Objectives and WBA Morality

That governments may soon be capable of measuring and aggregating subjective well-being does not answer the question of precisely what governments should seek to achieve and, in particular, what role distributional consequences should play. Much ink has been spilled on the deep questions of morality raised by these issues. It is beyond the scope of this Article to conduct a thoroughgoing analysis of these questions or to reach many firm conclusions, and we will not attempt such steps here. Rather, our objective is to set forth a list of criteria that could form the basis for WBA-based government policy. We take no position on how a government should balance these competing concerns, with the exception of one instance that we believe gives rise to a clear normative conclusion.

a. Aggregate Welfare. One conceivable objective of government is to maxi-

Taxation?, 37 J. LEGAL STUD. S293, S320 (2008) (citing study finding that “joblessness depressed well-being more than any other single characteristic”).

194. See Kahneman et al., *supra* note 45, at 1777 tbl.1 (finding that individuals report lower positive effect for commuting than for any other activity); Neil D. Weinstein, *Community Noise Problems: Evidence against Adaptation*, 2 J ENVIR. PSYCH. 87, 94 (1992) (finding study participants unable to adapt to negative effects of highway noise after one year and increasingly pessimistic about their ability to cope). See generally van Praag & Baarsma, *supra* note 111, at 230 (studying the impact of different types of noise in various cities).

195. See, e.g., Kahneman et al., *supra* note 45, at 1777 tbl.1.

196. See, e.g., Jonathan Haidt et al., *Hive Psychology, Happiness, and Public Policy*, 37 J. LEGAL STUD. S133, S149 (2008) (suggesting that “an increase in the availability of music, dance, and street festivals should increase happiness and trust while decreasing alienation and crime”); Christopher K. Hsee et al., *Two Recommendations on the Pursuit of Happiness*, 37 J. LEGAL STUD. S115, S115 (2008) (recommending investment in resources that are resistant to hedonic adaptation and inherently evaluable); Andrew J. Oswald & Nattavudh Powdthavee, *Death, Happiness, and the Calculation of Compensatory Damages*, 37 J. LEGAL STUD. S217, S217 (2008) (proposing the use of hedonic regression equations to calculate civil damages for pain and suffering).

mize the aggregate welfare of its citizens.¹⁹⁷ A government might thus pursue projects that increase the total WBUs of all individuals, aggregated across the entire span of their lives. We take no position on the importance of aggregate welfare in comparison to other measures or goals, with one exception: a project that increases the subjective well-being of one or more individuals while leaving the welfare of the other individuals unchanged is normatively desirable. (That is to say, WBA satisfies the Pareto principle.)¹⁹⁸ We can think of no objection, at least on welfarist grounds, to a project that will make some people better off without harming the remainder.¹⁹⁹

It is worth noting that this conclusion does not hold for conventional CBA. A project that made some people wealthier without altering the wealth of the remaining people might nonetheless make those unaffected worse off. Inflation effects could diminish their purchasing power and reduce the value of their money, or their diminished status in comparison to their fellow citizens could make them unhappy and reduce their welfare.²⁰⁰ These complications arise because wealth is only a weak proxy for welfare. In contrast, if a person's subjective well-being remains unchanged, that person's welfare has not decreased.

b. Per Capita Welfare. Another conceivable objective of government is to maximize the per capita welfare of its citizens, even at the expense of aggregate welfare.²⁰¹ Thus, a government might conceivably favor a project that would produce a population of 1,000 people, each with 6 WBUs, instead of a population of 1,550 people, each with 4 WBUs.²⁰²

c. Interpersonal Distribution. Another conceivable objective of government is to reduce the interpersonal disparities of welfare among its citizens, even if it comes at the expense of aggregate welfare.²⁰³ Thus, a government might

197. BENTHAM, *supra* note 25, at 12–13 (“An action . . . may be said to be conformable to the principle of utility . . . (meaning with respect to the community at large) when the tendency it has to augment the happiness of the community is greater than any it has to diminish it.”).

198. See generally Adler & Posner, *Rethinking Cost-Benefit Analysis*, *supra* note 129, at 188.

199. There may of course be non-welfare reasons for opposing such a project. We bracket them here.

200. See David G. Blanchflower & Andrew J. Oswald, *Well-Being Over Time in Britain and the USA*, 88 J. PUB. ECON. 1359, 1378 (2004); Richard A. Easterlin, *Will Raising the Incomes of All Increase the Happiness of All?*, 27 J. ECON. BEHAV. & ORG. 35, 44 (1995).

201. See, e.g., JOHN RAWLS, *A THEORY OF JUSTICE* 140 (1971) (“[T]he principle of average utility directs society to maximize not the total but the average utility (per capita). This seems to be a more modern view . . .”).

202. We have in mind something like state-funded counseling for parents planning on starting families. The goal would be to encourage families to have children only when they are fully ready and able to support and care for them. This would conceivably lead to a slightly smaller population of children raised under better circumstances.

203. See JOHN BROOME, *WEIGHING GOODS* 192–200 (1991) (setting forth a theory of equality grounded in relational fairness, or the distribution of good according to individuals' claims for it); FRED FELDMAN, *UTILITARIANISM, HEDONISM, AND DESERT* 154–74 (1997) (proposing a form of utilitarian theory that takes into account distributive justice).

conceivably favor a project that would result in a population of 1,000 people, each with 5 WBUs, instead of a population of 550 people with 6 WBUs and 450 people with 4 WBUs.²⁰⁴

d. Intrapersonal Distribution. Finally, another conceivable objective of government is to reduce the amount its citizens' welfare changes over time, even at the expense of aggregate welfare. Individuals might prefer stable levels of happiness, just as economists suggest that individuals rationally favor stable levels of consumption.²⁰⁵ Thus, a government might conceivably favor a project that would ensure an individual 5 WBUs of welfare for the entire duration of her life, instead of that individual spending the first half of her life at 6 WBUs and the second half of her life at 4.2 WBUs.²⁰⁶

We are at pains to reiterate that we take no position on which, if any, of these four objectives are normatively legitimate aims of government. We mean only to catalogue the types of objectives that a government, guided by a WBA-based decision procedure, might choose to pursue. Regardless of which goal or set of goals a government elects, WBA will prove to be a powerful analytical tool.

B. ADVANTAGES AND OBJECTIONS

Having outlined the affirmative case for a decision procedure based upon subjective well-being analysis, we proceed to confront four important objections to this approach.²⁰⁷ We argue that these objections are not insurmountable and, moreover, that they apply with equal force to the leading alternative, cost-benefit analysis. In addition, we highlight the two principal methodological advantages that WBA holds over CBA: (1) unlike CBA, WBA avoids errors involved in translating wealth into welfare; and (2) unlike CBA, WBA does not rely on hypothetical estimates of preferences through the use of contingent valuation studies.

1. Monetization

The first difficulty in implementing subjective well-being analysis lies in “monetizing”—here, more appropriately, “hedonizing”—the value of various projects. If a federal agency proposes to construct a dam that will lower electricity prices, but simultaneously interfere with recreational fishing and create noise and other nuisances, it may be difficult to translate the various effects of the dam into workable social welfare units in order to compare costs and benefits.²⁰⁸ Nonetheless, we believe that these types of problems remain eminently solvable.

204. A progressive income tax might have this type of effect.

205. For a review of research on how people value utilities at different times, see Shane Frederick et al., *Time Discounting and Time Preference: A Critical Review*, 40 J. ECON. LIT. 351 (2002).

206. Social Security and Medicare might have this type of effect.

207. Adler and Posner raise these objections. Adler & Posner, *supra* note 92, at S280–81.

208. *See id.* at S278–80.

To begin with, these are purely empirical questions. As psychologists accumulate data on hedonic responses to a diversity of circumstances and stimuli, policy makers will be able to reach ever more precise estimations of the hedonic consequences of the various aspects of a project. The task is no more theoretically daunting or costly than collecting general census data; the government need only deploy survey takers and invite psychologists and economists to analyze the results. Indeed, large-scale efforts at collecting general hedonic data, such as the British Household Panel Survey and the American General Social Survey, are already underway, and economists have gleaned substantial insights from even this unfocused information gathering.²⁰⁹ Research targeted directly at potential government projects will undoubtedly prove far more useful. For example, studies of the well-being consequences of living with various diseases may have an effect on policies related to medical decision making.²¹⁰

Moreover, traditional cost-benefit analysis suffers from the same types of problems and is no better able to cope with them. It is nearly impossible to price the harm to recreational fishing or the annoyance associated with construction noise without surveying the affected populace,²¹¹ just as one might survey their hedonic attitudes; and there is no reason to believe that contingent valuation data—which ask people in the abstract how much they would be willing to pay to avoid construction noise or to save a fishery—are easier to collect or more reliable.²¹²

209. See, e.g., Lucas et al., *Reexamining, supra* note 56, at 527 (using data on marital transitions to study changes in satisfaction); Andrew J. Oswald & Nattavudh Powdthavee, *Does Happiness Adapt? A Longitudinal Study of Disability with Implications for Economists and Judges*, 92 J. PUB. ECON. 1061, 1064–72 (2008) (using longitudinal study of life satisfaction for disabled people to show hedonic adaptation).

210. See Peter A. Ubel et al., *Misimagining the Unimaginable: The Disability Paradox and Health Care Decision Making*, 24 (No. 4 Suppl.) HEALTH PSYCHOL. S57, S57 (2005).

211. Hedonic price or wage methods can be used to estimate the price of harm in some instances. For example, the value of the risk of increased injury on the job can be evaluated by examining the wage premiums paid to workers in the industry. See W. KIP VISCUSI, *FATAL TRADEOFFS: PUBLIC AND PRIVATE RESPONSIBILITIES FOR RISK* 34–74 (1992). However, hedonic price or wage methods, as an indirect means of estimation, are subject to identification, multicollinearity, and information problems that make it impossible to accurately value some things. See Robert W. Hahn & John A. Hird, *The Costs and Benefits of Regulation: Review and Synthesis*, 8 YALE J. ON REG. 233, 241–43 (1991).

212. See generally Peter A. Diamond & Jerry A. Hausman, *Contingent Valuation: Is Some Number Better than No Number?*, 8 J. ECON. PERSP. 45 (1994) (discussing the recurrent problems with contingent valuation surveys and providing an overview of alternative explanations for the responses given in willingness-to-pay questions); Robert H. Frank & Cass R. Sunstein, *Cost-Benefit Analysis and Relative Position*, 68 U. CHI. L. REV. 323, 373–74 (2001) (concluding that the positional and relative effects of wealth cause measures of willingness to pay to systematically understate the benefits of regulatory change and recommending that government agencies accordingly compensate in their estimations). But see W. Michael Hanemann, *Valuing the Environment Through Contingent Valuation*, 8 J. ECON. PERSP. 19, 22–32 (1994) (claiming that properly administered contingent valuation surveys can produce stable, replicable, and valid responses); Thomas J. Kniesner & W. Kip Viscusi, *Why Relative Economic Position Does Not Matter: A Cost-Benefit Analysis*, 20 YALE J. ON REG. 1, 16 (2003) (arguing against the Frank and Sunstein proposal because, among other reasons, increasing the estimated

Indeed, on this point WBA holds two advantages over typical CBA. First, as we note above, there is a tighter theoretical connection between, for instance, the nuisance caused by construction noise and an individual's subjective well-being than between that same nuisance and an individual's willingness to pay to be rid of it.²¹³ After all, willingness to pay is only a proxy for nuisance-related harm; the hedonic cost is the actual relevant quantity. In order to arrive at willingness-to-pay figures, the affected individual must first translate this expected hedonic penalty into a monetary amount. WBA avoids the errors associated with this translation, including the empirically observable fact that an individual's wealth will distort how much she is willing to pay to avoid some harm (with willingness to pay increasing with wealth).²¹⁴ The comparative advantage of CBA is that many of the costs and benefits of governmental projects are already monetized. Decreases in the price of electricity, for instance, are measured in dollars, while WBA would require that they be translated into WBUs. However, economists have already begun to assemble highly robust measures of wealth effects on subjective well-being,²¹⁵ so this act of translation may soon become relatively simple.

Second, hedonic analyses, unlike contingent valuation studies, are not hypothetical. Few individuals will ever be offered the opportunity to trade small amounts of money for diminished construction noise or slightly improved recreational fishing opportunities; government regulation exists in large part because the transaction costs of such arrangements are too high.²¹⁶ Even when individuals are forced into implicit tradeoffs—when the agency decides not to construct the dam, for instance, and electricity prices do not decline—the associations between costs and benefits are usually too ephemeral to make post hoc judgments reliable.²¹⁷ Contingent valuation studies are thus forced to rely primarily on laboratory-based hypothetical questions regarding hypothetical

benefits from regulation by even 50% would not ultimately change current regulatory evaluations because this increase would fall within the typical range of possible outcomes already employed in real-world cost-benefit analyses).

213. See *supra* section IV.A.1.

214. W. Kip Viscusi and Joseph E. Aldy, *The Value of a Statistical Life: A Critical View of Market Estimates Throughout the World*, 27 J. RISK & UNCERTAINTY 5, 36–43 (2003) (finding an income elasticity between 0.5 and 0.6, such that a 10% rise in income would increase WTP by 5%–6%); see also Thomas J. Kniesner et al., *Policy Relevant Heterogeneity in the Value of Statistical Life: New Evidence from Panel Data Quantile Regressions*, 40 J. RISK & UNCERTAINTY 15 (2010) (finding an income elasticity approaching or exceeding 1.0, such that a 10% rise in income would increase WTP by 10% or more); W. Kip Viscusi, *The heterogeneity of the value of statistical life: introduction and overview*, 40 J. RISK & UNCERTAINTY 1 (2010) (summarizing more recent research finding that WTP values are more sensitive to income than previously thought).

215. See, e.g., Oswald & Powdthavee, *supra* note 196, at S232–44.

216. See Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1111–15 (1972); R.H. Coase, *The Federal Communications Commission*, 2 J. LAW & ECON. 1, 28–29 (1959).

217. See generally Diamond & Hausman, *supra* note 212 (discussing the recurrent problems with contingent valuation surveys and providing an overview of alternative explanations for the responses given in willingness-to-pay questions).

payments to forestall hypothetical projects. By contrast, hedonic analyses compare individuals' actual levels of happiness before and after an actual project is completed. It may of course be difficult to isolate the hedonic effects of the project itself among all of the possible confounding variables, but sophisticated multivariate regression has already proven equal to the task on many occasions.²¹⁸

Similarly, even revealed preference studies often rely on predictions or retrospective judgments that are notoriously unreliable. For example, consider a regulation that improves the air quality in a certain area. We might measure the value of that regulation in monetary terms by examining the increase in home prices in that area since the regulation.²¹⁹ These home prices depend in part on two important factors. The first is a current homeowner's reservation price, which relies to some degree on the value she places on this house as compared with a house in an area with lower quality. The second is the value that a potential purchaser places on this improved air quality, which in turn requires a prediction of how much that air quality will improve her life. Thus, the current homeowner must remember what the air was like before the improvement and estimate her welfare loss from returning to such a state; and the prospective homeowner must estimate how valuable the improved air will be to her in the future. Study after psychological study has shown that both of these exercises are fraught with error.²²⁰ WBA, by contrast, will only require asking people about their current well-being. The governmental agency can thus compare the current well-being of a population that is receiving the benefits of some regulation with the well-being of that population (or a similar reference population) before the regulation was implemented to determine its impact. These findings can then be applied to similar situations in other locations. No prospective or retrospective judgments are necessary. Consequently, WBA may ultimately hold empirical advantages over traditional CBA.

2. Interpersonal Comparisons

The second potential pitfall for WBA is the difficulty in making interpersonal comparisons. If two people both rate their happiness at 6 on a 7-point scale, there is no way to be certain that they are actually experiencing equivalent levels of hedonic well-being. Similarly, if a government project will move Person A's average moment-by-moment well-being from 6 to 7 and Person B's from 6 to 5.5, it is impossible to know whether Person A's welfare has in fact improved more than Person B's has diminished.²²¹ If WBA is to rely on a

218. See Lucas et al., *Reexamining*, *supra* note 56, at 529–31; Oswald & Powdthavee, *supra* note 209, at 1066–70.

219. See Anup Malani, *Valuing Laws as Local Amenities*, 121 HARV. L. REV. 1273 (2008) (suggesting such an approach).

220. See *supra* section I.E.

221. See Adler & Posner, *supra* note 92, at S280–81 (“The question is whether the numerical scales used in SWB surveys correspond to a true, interpersonally comparable scale of happiness.”).

summing of individual welfare states, it will be difficult to compare the pre-project total of 12 with the post-project total of 12.5 absent a consistent interpersonal standard. This problem may not easily succumb to technological solution. Without the capacity to physiologically measure happiness (using fMRI technology to scan individuals' brains, for instance), third parties will be unable to observe individuals' true levels of subjective well-being.

At the same time, this issue should only mildly concern policymakers analyzing large-scale projects. Individuals may respond slightly idiosyncratically to happiness surveys, but across large populations—hundreds or thousands of people—these small interpersonal differences should tend to average out. There is no reason to believe that particular American demographic groups respond to hedonic surveys in particular ways. Variations among individuals in how they rate their own happiness—what they mean when they rate themselves a 5 or a 6, for instance—are likely to be random, not biased.²²² Large numbers of survey responses should successfully mitigate these discrepancies.²²³

Most important, cost-benefit analysis is equally subject to this criticism. Because of the diminishing marginal value of money, two individuals with differing levels of personal wealth can obtain vastly different amounts of welfare from the same gain (or loss) of income.²²⁴ Adjusting CBA in accordance with variations in marginal values of money is quite technically complex, and the proper solution is frequently unclear or highly context-dependent.²²⁵ The problems for CBA do not end there. Even two equivalently wealthy

222. There is some reason to believe that citizens of different nations with vastly different cultures will treat happiness surveys systematically differently. See ED DIENER & EUNKOOK M. SUH, *CULTURE AND SUBJECTIVE WELL-BEING 3* (Ed Diener & Eunkook M. Suh eds., 2000) (“If societies have different sets of values, people in them are likely to consider different criteria relevant when judging the success of their society.”). However, empirical studies have found that similarly situated individuals in different countries have similar levels of life satisfaction. Betsey Stevenson & Justin Wolfers, “Economic Growth and Happiness: Reassessing the Easterlin Paradox,” *Brookings Papers on Economic Activity* (2008). This suggests that subjective well-being measures may even be comparable across countries. If that is the case, they will very likely be comparable across regions or communities within a given country.

223. See Rafael Di Tella & Robert MacCulloch, *Some Uses of Happiness Data in Economics*, 20 *J. ECON. PERSP.* 25, 29–32 (2006) (discussing the possibility of reducing systemic differential reporting biases by comparing across larger groups). In addition, the U-Index proposed by Krueger et al. is designed to mitigate differences in scale usage. See Krueger et al., *supra* note 184, at 18–20.

224. See, e.g., Ed Diener & Carol Diener, *The Wealth of Nations Revisited: Income and Quality of Life*, 36 *SOC. INDICATORS RES.* 275, 279–81 (1995); Robert H. Frank, *The Frame of Reference as a Public Good*, 107 *ECON. J.* 1832, 1834–35 (1997) (discussing variation in the significance of income's role in satisfaction across income levels).

225. See JAMES C. McDAVID & LAURA R.L. HAWTHORN, *PROGRAM EVALUATION & PERFORMANCE MEASUREMENT: AN INTRODUCTION TO PRACTICE* 265–66 (2006) (“Analyzing such situations in benefit-cost analyses can be complex. It is not easy to estimate the marginal benefits or costs associated with income redistribution, although it is generally believed that the marginal value of money tends to be greater with lower incomes. Generally, analysts tend to assume that transfers are neutral with respect to the marginal value of money simply because estimates of the magnitudes of differences are difficult to construct and defend.”); see also ADLER & POSNER, *supra* note 15, at 142–46; Adler & Posner, *Rethinking Cost-Benefit Analysis*, *supra* note 129, at 177–81 (illustrating the difficulty of forward-looking cost-benefit analysis under income effects).

individuals may have vastly divergent welfare functions—additional wealth might benefit one far more than the other. Individuals' welfare functions are unobservable;²²⁶ economists know (or assume) that marginal values of money are positive and diminish with increasing wealth, but they can be sure of little else.²²⁷ Economists typically respond to this problem by simply assuming that its effects dissipate across large populations²²⁸—precisely the approach we advocate for WBA. It is thus hard to imagine that interpersonal comparisons will present greater difficulty for WBA than they do for classical CBA.

3. Aggregation

A third possible obstacle for WBA lies in the ambiguities involved in aggregating interpersonal welfare states. For instance, if Person *A*'s welfare decreases from 6 to 5 and the welfare of Persons *B* through *Z* increases from 6 to 6.1, it is difficult to know whether this net gain of 1.5 WBUs²²⁹ actually indicates that overall welfare has increased, decreased, or remained constant.²³⁰

This objection has two components. The first is simply a repetition of the interpersonal comparison problem discussed above: it is impossible to know whether a hedonic improvement for Person *B* from 6 to 6.1 is of equivalent magnitude to a hedonic regression for Person *B* from 6 to 5.9. We have already addressed this question in section IV.B.2 and explained that such differences should wash out across large populations (and are no more severe than similar issues facing CBA). The second component is the argument that, when a project leaves some people better off and others worse off, a weak welfarist cannot conclude that it is worth pursuing merely because overall welfare has increased. This claim is certainly correct, but it is again identical to the problems faced by CBA or any other wealth-based decision procedure. The simple fact that a project will result in Person *A* receiving \$100 and Person *B* losing \$50 is not sufficient reason to undertake the project in light of distributional issues and other considerations beyond aggregate welfare.²³¹ This is merely another way

226. See PER-OLAV JOHANSSON, *AN INTRODUCTION TO MODERN WELFARE ECONOMICS* 40–56 (1991); ROBERT NADEAU, *THE WEALTH OF NATURE* 115–16 (2003).

227. Uncertainty concerning individual welfare functions is especially problematic when attempting to make interpersonal comparisons of utility, which are likely possible in only limited circumstances. See, e.g., John C. Harsanyi, *Cardinal Welfare, Individualistic Ethics, and Interpersonal Comparisons of Utility*, 63 *J. POL. ECON.* 309, 315–19 (1955) (“[E]ach individual has a utility function of his own, expressing his own individual taste. . . . In general, the greater the psychological, biological, cultural, and social differences between two people, the greater the margin of error attached to comparisons between their utility.”).

228. See, e.g., Adler & Posner, *Rethinking Cost-Benefit Analysis*, *supra* note 129, at 119; Di Tella & MacCulloch, *supra* note 223, at 29.

229. Twenty-five people have each gained 0.1, for a total gain of 2.5, and one person has lost 1, for a net of 1.5.

230. See Adler & Posner, *supra* note 92, at S281.

231. This is true if Person *A* and Person *B* have different welfare functions, such that the project might diminish overall welfare—again, the problem we address in section IV.B.2—but it is also true even if they have identical welfare functions and aggregate welfare will increase.

of stating that there is no independent moral or normative significance to Kaldor–Hicks efficiency, which is by now a well-accepted conclusion among economists.²³²

In the preceding section, we outlined a set of potential moral criteria for evaluating projects based on WBA. These criteria include aggregate welfare, per capita welfare, and distribution-adjusted aggregate welfare.²³³ There is little more to be said on that topic here; suffice it to add that the unarguable difficulties in negotiating between those various criteria are no greater for WBA than they are for CBA.

4. Intertemporal Compensation

The final important objection to WBA focuses on hedonic compensations for prior events—when someone is compensated during Period 2 for a decrease in welfare that occurred during Period 1. Imagine that an individual has been injured in a car accident, causing her average moment-by-moment well-being to fall from 6 to 5 for a period of one year (it then returns to 6).²³⁴ Imagine that there were two potential methods of compensating her for her injury: Plan A would raise her well-being from 6 to 7 for one year, and Plan B would raise her well-being from 6 to 6.5 for two years. An objector might argue that it is unclear whether either of these plans would compensate her appropriately. Depending on the relationship between her survey responses and her actual well-being, and on how she values the well-being of each of her various temporal selves, either Plan A or Plan B might over- or under-compensate her.

Upon examination it becomes evident that this objection again reduces to a combination of two arguments we have already addressed. The issue of whether a decline from 6 to 5 is of equivalent magnitude to an improvement from 6 to 7 (or twice that of an improvement from 6 to 6.5) is merely an intrapersonal variant on the quandary regarding interpersonal comparisons and the shape of hedonic curves.²³⁵ We have already dealt with this question and shown that it is, if anything, more easily handled than the parallel problems surrounding CBA. Similarly, the intertemporal problem—whether a gain in Period 2 effectively counterbalances a loss in Period 1—is an intrapersonal variant on the question of interpersonal aggregation and the moral significance of overall welfare.²³⁶ We have addressed this question as well.

We do not mean to overstate the ease with which agencies and other decision

232. See ADLER & POSNER, *supra* note 15, at 21–23; Adler & Posner, *Rethinking Cost-Benefit Analysis*, *supra* note 129, at 195. But see Richard A. Posner, *The Ethical and Political Basis of the Efficiency Norm in Common Law Adjudication*, 8 HOFSTRA L. REV. 487, 491–97 (1980) (attempting to justify Kaldor-Hicks efficiency as a moral criterion); Richard A. Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUD. 103, 103 (1979) (same).

233. See *supra* section IV.A.

234. As with the preceding sections, we draw this hypothetical (and this objection) from Adler & Posner, *supra* note 92, at S281.

235. See *supra* section IV.B.2.

236. See *supra* section IV.B.3.

makers could implement subjective well-being analysis. The science of hedonic well-being remains in its infancy, and the type of detailed theoretical framework that surrounds CBA does not yet exist for WBA. This Article is an initial step in the direction of supplying such a new framework. But it is worth noting that none of the objections to WBA is insurmountable, and none is more daunting than similar questions that have plagued CBA. If there is a reason to suspend the exploration of WBA as a decision procedure, we have not found it.

CONCLUSION

Economists, philosophers, and lawyers have long agreed that one of government's foremost responsibilities is to improve the welfare of its citizens. But they have disagreed vehemently over the best conception of welfare. Some have argued for a vision of welfare defined by the satisfaction of preferences, whereas others have promoted a theory of welfare based on objectively good acts. We argue instead that an individual's welfare can be plausibly understood as her subjective well-being—how she feels, and how much happiness she experiences. We believe that conception of welfare is capable of resisting the most trenchant challenges leveled against it.

Policymakers have long treated cost-benefit analysis as the preeminent decision procedure, and CBA is now firmly ensconced within the modern regulatory state. But CBA only makes sense as the methodological tool of first resort if wealth is the best available proxy for welfare. Hedonic psychology demonstrates that it is not. Psychologists have developed excellent proxies for measuring and studying subjective well-being directly, proxies that hold theoretical and empirical advantages over CBA. Because it is now possible to measure subjective well-being directly, we argue that governments and policymakers should adopt a decision procedure based upon subjective well-being—well-being analysis. Well-being analysis is, without question, in its infancy. Nevertheless, it may someday become a leading means of measuring the quality of human life.