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Illusory Losses

Cass R. Sunstein

ABSTRACT

Recent empirical work demonstrates that healthy people make large mistakes when evaluating the welfare of those suffering from apparently serious health problems. Significant adverse conditions often inflict little or no hedonic damage—sometimes because people adapt to them, and sometimes because those who suffer many losses do not, after a time, focus on them. These findings have important implications for the legal system, especially for awards for pain, suffering, and hedonic losses, where juries are likely to overestimate the effect of injuries on happiness. There are two important qualifications. First, some injuries, such as chronic pain, do inflict significant hedonic losses because people cannot adapt and inevitably focus on them. Second, people may suffer capability loss without suffering hedonic loss, and that loss should be compensable. The legal system might be improved by civil damages guidelines to correct hedonic judgment errors by juries. Broader implications include the appropriate priorities for governments attempting to improve the welfare of their citizens.

Nothing in life matters quite as much as you think it does while you are thinking about it. [Kahneman and Thaler 2006, p. 229]

1. SIX CLAIMS

In this essay I attempt to defend six principal claims:

1. In advance, people greatly exaggerate the hedonic effects of many adverse events, largely because they do not anticipate their remarkable

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S157

capacity to adapt to changes. This capacity stems in part from a distinctive feature of human attention: those who suffer many losses do not focus, constantly or much, on those losses. It follows that many losses are illusory or at least exaggerated, in the sense that they inflict far less hedonic damage than people anticipate.

2. Both juries and judges are likely to make hedonic judgment errors, in a way that produces inflated damage awards. One reason for these errors is that in evaluating losses, observers suffer from adaptation neglect; another reason is that the legal system asks juries and judges to focus on, and thus to attend to, losses to which plaintiffs might well devote little attention in their ordinary lives. In short, the legal system almost certainly produces focusing illusions in tort cases.

3. It is important for the legal system to distinguish between harms that impose enduring losses, such as chronic pain and mental illness, and harms that do not, such as losses of fingers and toes. The distinction between enduring and illusory losses—for which ringing in the ears and loss of toes are illustrative cases—has many implications for economic and regulatory policy.

4. Without acknowledging that it is doing so, the legal system appears to be awarding capability damages under the name of hedonic damages. Juries award damages for the loss of capabilities, even in contexts in which people are not suffering a loss in the enjoyment of their lives. It is not clear whether jurors are explicitly aware of the importance of capabilities or whether they are instead making hedonic judgment errors.

5. It would be desirable to reform the legal system with the aid of a civil damages schedule, designed to accomplish three distinctive tasks: translating hedonic losses into monetary terms, correcting hedonic judgment errors, and assessing capability damages where appropriate.

6. An understanding of hedonic judgment errors raises the serious possibility that many policies, both fiscal and regulatory, are ill directed. Government might be expending resources in the false hope that the expenditures will improve well-being. There are complex questions, however, about the relationships among hedonic effects, capabilities, meaning, and the ingredients of good lives. A sensible society is not concerned only about “happiness” or even subjective well-being, although both of these certainly matter.

in June 2007; George Loewenstein and Peter Ubel provided especially helpful comments.

Now for the details.

2. DOLLARS AND WELFARE

The legal system must often assign monetary values to actual or apparent welfare losses. When those losses are purely monetary, the assignment need not be difficult. If a defendant has deprived a plaintiff of \$10,000, the legal system will require the defendant to pay \$10,000 to the plaintiff. But the legal system has a great deal of difficulty in turning some welfare losses into monetary equivalents.

2.1. Doctrine

Suppose that Jones has lost the use of two toes, or that Smith has become blind, or that Wilson has been paralyzed from the waist down, or that Holmes has developed a high degree of posttrauma anxiety, or that Johnson has been subject to racial harassment, or that Benson has suffered a loss of cognitive capacity, or that Dickerson has become impotent. The legal system allows people to recover for pain and suffering. The adverse effects captured in the idea of pain and suffering are undoubtedly real, and the legal system should attempt to deter them and to provide compensation. Indeed, hedonic losses are often the most serious injuries that people face—far more serious than strictly economic losses. But the resulting damage awards are notoriously variable (Leebron 1989), and it is not clear that they are in any sense rational or coherent (Viscusi 1988; Bovbjerg, Sloan, and Blumstein 1989; Rodgers 1993). An initial problem, which I will explore below, is that of the extreme difficulty of translating pain and suffering into monetary equivalents.

In many states, people are also permitted to recover hedonic damages, designed to capture people's loss of enjoyment of their lives. The line between pain and suffering on the one hand and hedonic damages on the other can be obscure; events that impose suffering also impose hedonic losses. The basic distinction is that hedonic damages cover not affirmative distress or suffering but forgone gains, as when people are unable to engage in valued activities, such as athletics (see *Day v. Ouachita Parish School Bd.*, 823 So. 2d 1039, 1044 [La. Ct. App. 2002]; *Allen v. Wal-Mart Stores, Inc.*, 241 F.3d 1293, 1297 [10th Cir. 2001]). Hedonic damages might be sought, for example, for the loss of a dog (see, for example, *Campbell v. Animal Quarantine Station*, 63 Haw. 557, 632 P.2d 1066 [Haw. 1981]; *Knowles Animal Hosp. v. Wills*, 360 So.

2d 37 [Fla. Dist. Ct. App. 1978]), for the inability to engage in sexual relations (see *Varnell v. Louisiana Tech University*, 709 So. 2d 890, 896 [La. Ct. App. 1998]), for the loss of a limb (see *Pierce v. N.Y. Cent. R.R. Co.*, 409 F.2d 1392 [Mich. 1969]; *Matos v. Clarendon Nat. Ins. Co.*, 808 So. 2d 841, 849 [La. Ct. App. 2002]), for the loss of use of an elbow (see *Kirk v. Wash. State Univ.*, 746 P. 2d 285, 292 [Wash. 1987]), for depression and self-consciousness as a result of amputation of an arm (see *Coleman v. Deno*, 832 So. 2d 1016 [La. Ct. App. 2002]), for reduced cognitive capacity or mental retardation (see *Nemmers v. United States*, 681 F. Supp. 567 [C.D. Ill. 1988]), or for becoming bedridden and thus requiring constant care (see Berla, Brookshire, and Smith 1990). Here too, it is extremely difficult to translate the relevant interest into monetary equivalents.

Even before the translation occurs, juries and judges investigating hedonic damages and pain and suffering are asked, in a sense, to serve as “hedometers,” assessing the adverse welfare effects associated with one or another loss. For purposes of analysis, I shall henceforth refer to both pain and suffering and hedonic damages as “hedonic losses,” while recognizing that the principles behind them are distinct. The idea of hedonic losses is meant to capture the utility or (subjective) welfare losses produced by some adverse event. I use the term “hedonic” to underline the connection with the emerging literature attempting to measure hedonic effects; the word “utility,” understood in the standard way, would work equally well.

Of course it is reasonable to ask about the theory on which the relevant judgments of judges and juries are supposed to be based. As the law now stands, the working theory is one of appropriate compensation or “making whole”—with the understanding that the compensatory award is supposed to restore plaintiffs to the hedonic state, or the level of welfare, that they would have occupied if the injury had not occurred (for discussion, see McCaffery, Kahneman, and Spitzer 1995). Under appropriate assumptions, the award of compensation, properly calculated, will also create the right deterrent signal, and hence accurate awards will promote social welfare as well. If those who are harmed seek and receive compensation, compensatory and deterrent goals should generally march hand in hand. As we shall see, however, the two goals often diverge—as when a monetary award for serious pain, or chronic headaches, does little or nothing to make the plaintiff “whole” but does deter the kinds of acts that create serious pain or chronic headaches. In

such cases, an award that is hard to defend in compensatory terms might nonetheless be justified as a means of promoting optimal deterrence.

2.2. Measurement

How can judges and juries possibly serve as hedometers, lacking as they do direct access to people's experience? On a standard economic approach, the legal system should start with willingness to pay (WTP) (see, for example, Viscusi 1998). As we shall see, WTP might well reflect a hedonic forecasting error, in a way that complicates standard arguments for cost-benefit analysis as well as legal awards. But even if a forecasting error is not involved, there is no obvious way to ascertain the relevant amounts. Courts might ask, "How much would people pay to reduce a risk of some injury?" Suppose that Jones faces a 1/200,000 risk of losing his dog, of becoming impotent, or of being paralyzed from the waist down. How much would Jones pay to eliminate that risk? A method of this kind is used in the context of mortality risks, where the value of a statistical life (VSL) is ascertained by asking about monetary valuation as measured by reference to WTP (Viscusi 1994). Either revealed preference or contingent valuation studies might be used for this purpose.

But this approach is barred in tort cases (Viscusi 1988), which ask not about valuation of risks but instead about injuries after they occur. Technically, of course, the answer to the two questions might well turn out to be identical. If Jones would be willing to pay \$10 to eliminate a 1/200,000 chance of losing his dog, the loss of his dog would seem to be worth \$2 million. But this statement of equivalence raises many questions, at least if it is meant to capture actual behavior. Risk aversion, risk seeking, and various cognition distortions might ensure that people would pay far less, or far more, than \$10 to avoid a risk of 1/200,000, even if the ultimate loss would be worth \$2 million. In any case it is far from clear that most people would produce a monetary figure for a 1/200,000 risk of some injury, such as the loss of an arm, equal to 1/200,000 the amount that they would produce for a certainty of the same injury.

To assess hedonic damages, courts might be inclined to ask, "How much would people have to be paid to incur the relevant loss?" The question might be how much people would demand to give up three fingers, or two toes, or sexual capacities, or the use of an arm. This question is often described as involving "willingness to accept," or WTA (see Korobkin 2003). But the legal system bans courts from asking the WTA question, whether it is phrased in terms of WTA to face risks or

WTA to face actual losses (see McCafferey, Kahneman, and Spitzer 1995). There are two possible reasons, involving loss aversion and humiliation. Both of these may mean that people's WTA would be excessive if measured against the loss.

It is well established that people are highly averse to losses, in the sense that they will demand more to give up a good than they would be willing to pay to obtain that good in the first instance (see Thaler 1991). By itself, this point does not establish that WTA is the wrong measure; perhaps people's WTA more accurately captures the welfare loss than WTP (for a good discussion, see Korobkin 2003). But evidence suggests that loss aversion may well reflect a hedonic forecasting error: people greatly exaggerate the actual hedonic harms associated with a loss from the status quo (see Kermer et al. 2006). If the baseline is actual experience, then loss aversion is a mistake, because people are predicting a level of hedonic loss that they will not actually experience. And if this is so, then the WTA question is the wrong one; people's answers will not map onto the actual harm once the loss comes to fruition. In principle, the actual harm should provide the standard. I shall emphasize this point throughout, because it raises the possibility that in many domains, people's judgments about hedonic effects will be wrong.

In addition, it would seem to be humiliating for people to acknowledge that for a certain amount, they would be willing to allow someone to take two of their toes (see Korobkin 2003). Because they seek to avoid the humiliation, their answer to the question might greatly overstate the hedonic loss. Suppose that people were asked, "How much would you have to be paid to accept some physical injury?" Their response, including the humiliation involved in offering any answer at all, might be far higher than their hedonic loss. An obvious problem is the signaling effect of any affirmative answer. Those who say that they are willing to trade their toes for money might be offering a damaging signal about their concern for their own integrity, bodily and otherwise. Hence people's unwillingness to accept a monetary amount in return for some loss may not reflect the hedonic effect of the loss; the number may be inflated because of the signaling effect of acceptance.

Perhaps the right question is instead, "How much would people, having experienced the loss, need to be paid to feel adequately compensated for that loss?" This question, one involving "making whole" as distinct from "selling price," seems to capture the judgments actually made relevant by the legal system (see McCafferey, Kahneman, and Spitzer 1995). It also has the advantage of focusing directly on people's

experience—a strong point in favor of WTA over WTP. But the “making whole” question raises its own puzzles. How much money would be necessary to make a person as well off as he would be if he had not been injured at all? Suppose that someone has lost a spouse or a child, or that he now faces chronic (and severe) headaches, or that his face has been permanently disfigured. What amount of money would restore the plaintiff to her preinjury state? Perhaps a certain answer makes sense if it would enable the person to obtain medication to cure the headaches or an operation to correct the disfigurement. But if these are not feasible, what amount of money would restore the status quo? A standard answer refers to the amount that would make the injured person indifferent as between the injury and the injury with the compensation. But in cases of chronic and severe pain, or permanent disfigurement, we could easily imagine cases in which no amount would suffice.

Or suppose that someone has lost two toes or been paralyzed from the waist down. When asked how much would make them whole, it is possible that people would sincerely say that they would have to be paid (say) \$100,000 for the loss of two toes, or \$5,000,000 to be compensated for paralysis. But perhaps those very people do not suffer such a large hedonic loss from the relevant conditions. Perhaps they are not greatly suffering, or not suffering at all, but would nonetheless claim (sincerely) that very high amounts are necessary to compensate them (see Smith et al. 2006). I will explore this puzzle in some detail below, because it raises serious doubts about the standard economic analysis in many domains of law and policy.

Both WTP and WTA measures therefore face serious problems. Those problems might be overcome if the legal system had direct access to people's welfare. Armed with an actual hedometer, legal institutions might be able to make accurate measurements of the harmful effects of various losses. Those involved in law might be able to know, for example, whether or not the loss of two toes, or a pet, or serious disfigurement imposes a great deal of hedonic loss (see, for example, *Washington v. Aetna*, 886 So. 2d 572 [La. 2004]). The results of an accurate hedonic assessment would represent substantial progress, and a great deal of effort has been devoted toward making such progress (see, for example, Layard 2005; Kahneman et al. 2004; Ubel and Loewenstein 2008). Let us now see how the resulting findings might bear on law.

3. ADVERSE CONDITIONS AND HEDONICS

3.1. Resilience and Measurement

A major finding is that human beings are unexpectedly resilient. As a result, many apparently significant injuries do not inflict substantial long-term hedonic harms (Kahneman, Diener, and Schwarz 1999; Gilbert 2006). Perhaps above all, it is important to distinguish between those adverse conditions that impose large and persistent losses and those adverse conditions that, because of human resilience, impose only transitional, short-term, or modest losses.

For purposes of law and policy, a key point here is that people are often unable, in advance, to anticipate the hedonic effects of adverse events, and their inability on this count produces hedonic forecasting errors (see, for example, Gilbert et al. 1998). A central problem here is adaptation neglect: people neglect the extent to which they will be able to adapt to adverse changes and conditions. Adaptation is generally not a product of self-conscious efforts to minimize the effects of such changes; we are speaking of a general feature of human beings, not of successful efforts to embrace some form of Stoicism (Nussbaum 1996). Recall that, for the moment, my concern is genuinely hedonic losses. As we shall see, it is possible that people will not suffer such losses, strictly speaking, but will nonetheless suffer losses of an important kind.

It is reasonable to ask how hedonic effects are being measured. Most of the relevant work involves questions about global happiness or life satisfaction. People are asked, on a scale of (say) 0–8, about how happy they are, or how satisfied they are, with their lives. Skeptics might ask, “Do answers to such questions tell us anything at all?” This is a legitimate question, but people’s answers do turn out to be associated with independent tests of hedonic state, including frequent smiling, smiling with the eyes, quality of sleep, happiness ratings by friends, self-reported health, frequent expressions of positive emotions, and being sociable and outgoing (Kahneman and Kruger 2006). To date, no empirical work falsifies or even seriously undermines the suggestion that reports of global happiness are in fact reflective of actual happiness, understood as subjective mental states.

Skeptics might persist at this point, suggesting that what matters is not global life satisfaction but some aggregation of life moments. And, in fact, efforts have been made to assess people’s subjective well-being in this way (see Kahneman et al. 2004). We should not be surprised to find that in some domains, answers to global questions will be different

from aggregations of moments. Asked about how their life is going, divorced or unmarried people might give relatively less positive answers, focusing as they might on the fact that they are unmarried; but perhaps unmarried people experience more, and not less, in the way of moment-by-moment happiness. I will return to this possibility below.

It would also be sensible for skeptics to worry that whatever the measure, people who suffer from adverse conditions might be engaging in scale recalibration to reflect those conditions. Perhaps colostomy patients rank themselves high, on a bounded scale, on the ground that they are relatively happy, considering their condition; but perhaps they would rank themselves much lower if they were comparing themselves to healthy people. If so, the surprisingly high rankings of those with adverse conditions suggest not high levels of subjective well-being but a sense that things are going well enough, all things considered. This conjecture is apparently wrong. A number of efforts have been made to test for scale recalibration, and thus far the verdict is clear: there is no evidence of recalibration, and considerable evidence to the contrary (Ubel and Loewenstein 2008). I shall be speaking here mainly of findings about global life satisfaction, because these are the most numerous, but on occasion I will refer to moment-by-moment measures as well.

3.2. Adaptation Neglect and Hedonic Forecasting Errors

Let us begin with the limited hedonic effects of many positive changes. Lottery winners are not happier, a year later, than other people are (Frey and Stutzer 2002, pp. 410–11). Marriage is often thought to be associated with increases in happiness, but after a few years, married people are not happier than they were before (compare Clark et al. [2003] with Easterlin [2003]). Apparently marriage produces a significant hedonic boost, but the boost is short-lived, and people return fairly quickly to their premarriage state. Increases in salary have a similar feature; a 20 percent increase is highly welcome, but after a short period, people do not show a significant long-term change in self-reported happiness or life satisfaction.

With respect to many negative changes, including those that concern the legal system, the hedonic effects are often surprisingly small. It is remarkable but true that paraplegics are only modestly less happy than other people (Kahneman and Krueger 2006).¹ Young people who have

1. An interesting question, not explored in the hedonic literature, is the extent to which discrimination and stigma might contribute to the (admittedly modest) decrease in happiness or perhaps in more significant decreases in moment-by-moment happiness.

lost a limb as a result of cancer show no less happiness than similarly situated young people who have not had cancer (Ubel and Loewenstein 2008). Moderately disabled people recover to their predisability level after 2 years (Oswald and Nattavudh 2005). Kidney dialysis patients do not show lower levels of happiness than ordinary people (see Oswald and Nattavudh 2005). Colostomy patients report levels of happiness that are about the same as people who have not had colostomies (see Smith et al. 2006). Intriguingly, those with colostomies greatly exaggerate their actual level of happiness before they had colostomies—while those with reversed colostomies report that before the reversal, they were far less happy than they were in fact (see Ubel and Loewenstein 2008). I will return to these findings below.

From this evidence, it is fair to conclude that healthy people systematically overestimate the adverse effects of many physical problems. Those who face such problems experience unexpectedly little in the way of hedonic loss (Ubel and Loewenstein 2008). As I have noted, it is possible to question the relevant findings; social scientists do not yet have hedometers. But from the existing work, the basic conclusions follow whether we rely on global measures of happiness or life satisfaction or on moment-by-moment measures of mood and happiness, which might seem to be even more reliable (see Ubel and Loewenstein 2008).

In a less dramatic vein, assistant professors greatly overstate the effect of an adverse tenure decision on their subjective happiness (Gilbert and Wilson 2000). They expect that this decision will affect their happiness for many years and, in part for that reason, greatly want to be tenured. But after a few years have passed, those who were denied tenure show no less happiness than those who were tenured. Many voters believe that the outcome of an election will greatly affect their happiness a month after the election is held. But in that month, supporters of losing and winning candidates are as happy as they were before the election (Gilbert and Wilson 2000). People have been found to overestimate the welfare effects of personal insults, the outcomes of sports events, and romantic breakups; in all of these circumstances, the adverse effects, while real and for a time severe, are surprisingly small and short-term (Gilbert and Wilson 2000).

3.3. Enduring versus Illusory Losses (or Loud Unpleasant Noises versus Fewer Toes)

To say this is not to deny that some advantageous events and conditions create large and enduring gains and that some adverse events and con-

ditions impose serious and persistent losses. Various drugs, such as Prozac, apparently create long-term boosts in subjective well-being. It is easy to imagine changes in the allocation of time—from, say, commuting and work to socializing, vacations, and leisure—that would produce enduring benefits (see Frank 2000). Hence it is quite false to say that people's resilience and their capacity for adaptation ensure that social changes and interventions are powerless to affect happiness or life satisfaction. The task is to ensure that any changes counteract persistent rather than illusory losses or that they produce gains to which people will not quickly adapt.

On the negative side, consider the instructive and in a sense defining example of loud, unpleasant noise, which people much dislike and which they do not dislike less as time passes (Frederick and Loewenstein 1999). With respect to highway noise, people show approximately the same level of irritation over a period of more than a year—and as time passes, they become more pessimistic, not less so, about their ability to adjust to the noise (Weinstein 1982). The physiological effects of noise do not diminish in children over a significant period of time (Frederick and Loewenstein 1999). A study of college students finds greater levels of annoyance at dormitory noise at the end of the year than at the beginning (Frederick and Loewenstein 1999). Unpleasant noise reduces people's enjoyment of their lives, and it continues to reduce their enjoyment for significant periods of time. We should conclude that tortious behavior that causes (for example) loud ringing in the ears will impose very serious and quite long-term hedonic losses.

Many adverse conditions belong in the same category as noise. Just as people overestimate the hedonic harm of many physical losses, such as kidney dialysis and colostomies, so too people underestimate the hedonic effect of adverse effects, such as depression and chronic pain (see Ubel, Loewenstein, and Jepson 2003). Leading sources of low levels of happiness include mental illness (such as anxiety and depression) subjectively reported bad health (above all, pain imposes severe and continuing hedonic losses), unemployment (Frederick and Loewenstein 1999), and separation from a spouse (Layard 2005, p. 64). The process of divorce is bad, but not as bad as separation; notably, people adjust fairly quickly and return to their predivorce state (Clark et al. 2003).

More speculatively, we might suggest that some medical conditions produce significant and enduring losses to the extent that people do not stabilize but instead must anticipate medical results and consider, with some frequency, whether they are getting better or worse. Certain can-

cers, in which significant periods of time are spent expecting and receiving results, might well fall in the same category as noise. Similarly, the process of adaptation might be slowed, and focusing might be increased, if people are worrying about whether an adverse condition can be improved or reversed. Also speculatively, we might suggest that some conditions impose significant and enduring losses to the extent that they produce discrimination and stigma of the kind to which people do not easily adapt and on which they tend to focus. Serious facial disfigurement, for example, might produce enduring hedonic losses because of the social consequences of having a disfigured face.

It is therefore important to distinguish among four phenomena: (1) gains that are significant and enduring, such as those produced by relief of chronic pain, (2) gains that are largely illusory, such as those produced by increases in salary, (3) losses that are significant and enduring, such as those produced by pain, depression, and anxiety, and (4) losses that turn out to be low or even illusory (at least in the long term), such as those produced by loss of limbs or by colostomies. For purposes of the legal questions on which I am focusing here, the latter two phenomena are the most important.

3.4. Failures of Affective Forecasting

From these findings, we can draw two general conclusions. The first is that many apparently serious losses inflict relatively little in the way of long-term hedonic harm. The second is that people do not anticipate this fact; they expect far more harm than they actually experience. A key reason is that people neglect the power of psychological mechanisms that immunize them from the kinds of hedonic losses that they expect to face in the event that things go wrong. It is important to try to understand the sources of the resulting errors.

In many cases, people are subject to immune neglect; they do not see the power of their internal psychological immune system, which greatly diminishes the welfare effects of apparently significant changes. A related problem is that people demonstrate a kind of impact bias (see Gilbert et al. 1998), in the form of a tendency to exaggerate the effect of future events on their own emotional states. The exaggerations are sometimes described as a consequence of duration bias (Gilbert et al. 1998), understood as a tendency to overestimate of the length of time during which undesirable effects will have an emotional impact.

The implication for the legal system is clear. If ordinary people make mistakes in forecasting the effects of adverse events in their own lives,

there is every reason to think that juries (and judges) will make similar mistakes in assessing the effects of those events on plaintiffs, especially but not only when they are projecting future losses. Hedonic judgment errors are likely to affect those involved in the legal system as well as ordinary people in ordinary life. As we shall see, the same point applies to policymakers, including regulators.

3.5. Adaptation, Attention, and Focusing Illusions

Why, exactly, do adverse events often have relatively little effect on people's subjective well-being? The general phenomenon is adaptation. The most obvious mechanism involves diminished sensitivity to a change over time; what once seemed a large hedonic boost or a serious hedonic loss often becomes part of life's furniture. People do not anticipate this fact—hence adaptation neglect. A second mechanism, which might be defined as a distinct phenomenon, involves attention. When apparent losses inflict surprisingly little hedonic harm, it is often because people do not much focus on those losses after a period of transition (see Kahneman et al. 2007). There is some evidence that adaptation is the dominant explanation for people's erroneous hedonic forecasts with respect to health conditions. In particular, drawing people's attention to the possibility of adaptation reduces hedonic errors, whereas efforts to reduce focusing illusions had no such effect (Ubel, Loewenstein, and Jepson 2005).

A great deal of work explores the possibility of adaptive preferences, which arise as people adapt their preferences to the existing circumstances (see, for example, Elster 1983). Consider the tale of the fox and the sour grapes. Knowing that they are unavailable, the fox does not want the grapes; his preference is a product of their unavailability, to which he has adapted (Elster 1983). The point might be counted as a challenge to utilitarianism or to any account that emphasizes subjective mental states: If people do not want opportunities or goods that are unavailable, is it so clear that the unavailability of those opportunities or goods can be defended by reference to people's wants? Whether or not this question can be answered, it is clear that when people's preferences have adapted to a social situation, their hedonic state will be much better than outsiders will anticipate.

For an apparent real-world example, consider a study of self-reported health in India, a year after the Great Bengal Famine of 1943 (see Nussbaum 1999, p. 139). Only 2.5 percent of widows said that they were "ill," and none said that they were in "indifferent" health. By contrast,

45.6 of widowers said that they were either ill or in indifferent health. The irony was that the widows were in significantly worse health than the widowers (Nussbaum 1999). Evidently the widows adapted to their situation and generally believed that their health was good. In law, economics, political science, and philosophy, analysis of adaptive preferences has proved especially illuminating (Elster 1983), but we continue to lack an adequate understanding of the mechanisms of adaptation. Several different factors seem to be at work.

The term “hedonic adaptation” refers to the adjustment over time in the intensity of people’s emotional reactions to adverse events, in a way that ensures unexpectedly limited losses in terms of subjective happiness (see Frederick and Loewenstein 1999, p. 303). As I have noted, people’s affective responses to a bad event or condition typically abate as time passes (see Ubel, Loewenstein, and Jepson 2003). Those who have been denied tenure, or lost the use of a limb, or have had a colonoscopy, will react intensely at first, but after a year, their affective response will be much smaller. When moderately disabled people show little or no hedonic loss, adaptation, thus understood, is the key reason.

A distinctive mechanism, which can also be taken as a separate explanation for the general phenomenon of adaptation, involves the operation of human attention (see Kahneman and Sugden 2005). When people lose the use of an arm, they do not think, most of the time, about the fact that one of their arms does not work. Instead they focus on the central features of their hours and their days—their jobs, their meals, their relationships, the book they are reading or the television show they are watching. To the extent that significant losses do not produce hedonic damages, it is frequently because people’s attention is not directed, most of the time, to those losses. Kahneman and Thaler (2006, p. 229) describe the problem in a wonderful maxim, my epigraph here: “Nothing in life matters quite as much as you think it does while you are thinking about it.”

A failure to focus on what has been lost helps to explain the absence of substantial hedonic effects from apparently large losses. Focusing illusions help in turn to account for people’s surprise at the absence of such effects. People are surprised because they focus specifically on the loss, indeed they are often asked specifically to do so, and thus conclude that it has large hedonic effects, neglecting to see that those who have experienced the loss do not, most of the time, focus on it. For hedonic forecasting, the general point is that when asked to focus on a particular aspect of life or a particular ingredient in welfare, observers are likely

to make serious blunders, simply because in life, people do not usually focus on any particular aspect or any particular ingredient. As we shall soon see, many of the puzzles in the social science literature on subjective well-being are best explained in this light.

Consider a simple demonstration of a focusing illusion. Many people appear to believe that they are less happy than they would be if they lived in California (see Schkade and Kahneman 1998). This belief is held by both people who live in California and people who do not live in California. But in fact, those who live in California are not happier than those who live elsewhere. Focusing on California weather in particular, Californians and Ohioans believe that they would be happier in California even though weather is not, in fact, an important determinant of most people's happiness. Failures in affective forecasting are often a product of a focusing illusion: people focus on a particular loss without seeing that after the loss has occurred, they are not likely to focus (much) on that loss.² When primed to think about weather, or any other factor that is a small ingredient in the subjective well-being of most people (such as, for example, the ability to perform well in sports), focusing illusions lead people to give excessive attention to that factor.

Contingent-valuation studies run into an exceedingly serious problem for this reason (see Bateman and Willis 1999). In such studies, people are specifically asked to value some good, event, or state of affairs (including modest improvements in climate). If the focusing illusion is at work, the resulting numbers will be unrealistically high. We could easily imagine such a study with respect to the loss of two toes, an arm, or a leg. If nothing in life matters quite as much as people think it does when they are thinking about it, then contingent-valuation studies are likely to inflate the importance of certain goods, because they are explicitly designed to make people think about (the relevant) "it." It should be easy to see that a similar problem might infect judges and juries, which are, by hypothesis, being focused on a particular loss.

These points, and an understanding of attention in particular, help to explain why some conditions do in fact produce serious or enduring losses. Noise is the exemplar here; loud and unpleasant noises create such losses because it is hard not to focus on them. In the same vein, conditions that impose enduring losses command attention; people necessarily focus on them. It is hard, for example, not to attend to chronic

2. Note, however, the failure to replicate the finding of a focusing illusion in Ubel, Loewenstein, and Jepson (2005).

pain. By definition, depression and anxiety cannot be put to one side. To the extent that social situations draw constant attention to a condition, people will attend to that condition. When people are separated from their spouses, they are focused, much of the time, on that fact. A few years afterward, divorce becomes a background fact, not a source of constant attention. Parents whose children are suffering or needing constant attention will experience serious hedonic losses; it is hard not to attend to the needs or distress of one's children, and such distress can serve, for parents, as exceedingly loud noise (with remarkable amplifiers).

Other puzzles in the hedonic literature can be similarly understood. Marriage produces a short-term burst in life satisfaction, because those who are recently married are thinking, much of the time, about their recent marriage. But after a few years, marriage becomes part of life's furniture, and it ceases to create the hedonic boost—even if the union is entirely happy.

We are now in a position to understand one of the most counterintuitive findings in the hedonic literature. The life satisfaction of many disabled people is not greatly lower than that of able-bodied people, and for some kinds of disabilities, life satisfaction is essentially the same. At the same time, many disabled people believe that they were happier before they were disabled, and there is clear evidence that they would pay a great deal to return to their predisability state (see Samaha 2007). If the analysis here is correct, disabled people are themselves subject, or made subject, to a focusing illusion when they are asked how their lives were (would be) different when they were (if they were) not disabled, or how much they would pay not to be disabled in terms of money or remaining years of life.³ I am not sure that this claim is correct; we do not have sufficient evidence to know for sure. But if the claim seems preposterous, consider the following question: "Would you be happier if the weather in your city—say, Chicago, Boston, New York, or Philadelphia—were automatically converted to the weather of Los Angeles or San Francisco?" You might well say yes. But you would be wrong.

3. It is possible, however, that disabled people are showing an implicit appreciation of the importance of capabilities, an issue that I take up below.

4. LEGAL IMPLICATIONS

4.1. Juries, Adaptation, and Attention

For the legal system, there is a concrete implication. Juries and others are likely to make hedonic judgment errors, often exaggerating the hedonic effects of losses.⁴ The first problem is that juries and judges will almost certainly suffer from adaptation neglect. The second problem is that when asked to award damages for a certain loss, the attention of the jury (and the judge) is specifically fixed on the loss in question. It is as if juries were asked, “Would you be happier in California?” Deliberately focused on a particular injury, juries are unlikely to see that most of the time, the plaintiff may not be much focused on the particular injury. The very circumstances of trial invite adaptation neglect and create the focusing illusion.⁵ In the legal system, juries and judges are asked specifically to think about the importance of the things that they are intensely thinking about.

Suppose, for example, that a plaintiff has lost two fingers or an arm, and the jury is asked to monetize the loss, including the pain and suffering associated with it. Because of the power of the psychological immune system, it is not implausible to think that the loss is short-term and very small. After a period of adjustment and (admittedly nontrivial) transition costs, those who lose two fingers, or even an arm, may be only modestly worse off, in hedonic terms, than those who have suffered no such loss. In fact they might not be worse off at all; recall that there is no discernible hedonic difference between ordinary people and those who have lost a limb as a result of cancer (see Ubel and Loewenstein 2008).

Juries and judges are unlikely to understand this point. In all probability, they too will show adaptation neglect and suffer from a focusing illusion, akin to those asked whether they would be happier if they lived in California. It is sensible to think that in the award of damages, the legal system is likely to be showing a systematic bias as a result. And, in fact, it is not difficult to find cases in which such a bias is exhibited,

4. An illuminating discussion, overlapping with the treatment here and focused on hedonic damages in particular, is Bagenstos and Schlanger (2007).

5. Admittedly, this is true for plaintiffs as well as for juries. Those who bring suit will likely focus on their injury—likely more so than those who do not bring suit. On purely hedonic grounds, it might well make sense to discourage (some) plaintiffs from bringing suit, because litigation will prevent hedonic adaptation. To the extent that the suit focuses the plaintiff on the relevant condition, the problem I am describing—exaggerated damage awards—is reduced.

with substantial damage awards for adverse events that are unlikely to have inflicted serious hedonic losses (see, for example, *Dauria v. City of New York*, 577 N.Y.S. 2d 64 [App. Div. 1991]; *Coleman v. Deno*, 832 So. 2d 1016 [La. Ct. App. 2002]; *Squibb v. Century Group*, 824 So. 2d 861 [La. Ct. App. 2002]; *Thornton v. Amtrak*, 802 So. 2d 816 [La. Ct. App. 2001]; *Keefe v. E & D Specialty Stands, Inc.*, 708 N.Y.S. 214 [N.Y. App. Div. 2000]). Consider, for example, a \$1 million award for the loss of feeling and strength in a hand (see *Keefe v. E & D Specialty Stands, Inc.*, 708 N.Y.S. 2d 214) or an award of \$1.5 million for the amputation of a finger (*Thornton v. Amtrak*, 802 So. 2d 816).

We might reach a similar conclusion for hedonic damages. If someone has lost a dog, he is likely to suffer, and the legal system should award compensation. But the suffering will not usually last a long time.⁶ Or suppose that someone has lost mobility, so that she can no longer ski or play tennis. If the question is how much that person has lost in terms of enjoyment of life, understood in hedonic terms, the answer is, very plausibly, little or nothing.

It is both true and important that even if long-term harms are not likely, the short-term harms might be severe. People might experience a degree of distress, fear, mourning, and grief for which a significant degree of compensation is justified. Large monetary awards might well be given for short periods of intense suffering or sense of loss. The only point is that juries are likely to exaggerate the long-term effects and to that extent to award excessive damage awards. If short-term harms are severe, they should be recognized and compensated as such.

The existence of hedonic forecasting errors also suggests the possibility that juries are awarding insufficiently large sums in cases in which the hedonic loss is likely to be high. Recall that for some losses, people underestimate that loss. Suppose, for example, that a plaintiff is suffering chronic back pain. The pain may be relatively low level, but it might be persistent. It is not difficult to find cases in which juries award low damage awards in such instances (see, for example, *Levy v. Bayou Indus. Maint. Serv.*, 855 So. 2d 968, 980 [La. Ct. App. 2003], awarding \$50,000 for postconcussion syndrome, including vertigo and migraine headaches). Consider, for example, a \$4,000 award for an accident producing headaches three to four times per week and persistent pain in the hands, knees, and shoulders (*Hatcher v. Ramada Plaza Hotel & Conf. Ctr.*,

6. I put to one side the question whether the dog's loss should be treated as a loss for the dog, not for human beings; I would answer that question affirmatively.

2003 Conn. Super. LEXIS 255 [Conn. Super. Ct. 2003]), a \$25,000 award to 19-year-old woman whose accident causes a painful hip deformity, headaches, ringing in the ears, permanent arthritis in the hip, and backaches (*Frankel v. Todd*, 260 F. Supp. 772 [E.D. Pa. 1966]), an award of \$47,000 for an accident causing herniation in the lower back, accompanied by permanent radiating pain and restriction (*Ledesma v. Long Island R.R.*, 1997 WL 33346870 [E.D.N.Y. 1997]), or an award of \$30,000 for permanent pain in the neck and knee from a herniated cervical disc and torn meniscus (*Russo v. Jordan*, 2001 N.Y. Slip Op. 20062U, 9 [N.Y. Misc. 2001]). In all these cases, the award seems far too low, because the relevant injury is likely to be enduring.

In the abstract, low-level back pain, headaches, ringing in the ears, and pain in the neck and knee may not seem especially serious; these are familiar phenomena, unlike loss of a limb. It is easy to imagine a jury judgment that while headaches are unpleasant, they are part of daily life, and that the loss of a limb is devastating. But to the extent that headaches, ringing in the ears, and similar conditions are severe, they are likely to operate in the same way as noise: as problems that do not improve much over time. People might well undervalue such injuries with the thought that such conditions are ordinary parts of human experience—unlike, say, the loss of toes. But those who face chronic pain, severe headaches, or loud ringing in the ears suffer massive hedonic losses, and jurors are unlikely to appreciate that fact.

It is possible of course that some juries and judges might distrust claims of back pain and to be discounting the award because of the risk of faking. But even if those involved in the legal system do believe the claims, they will probably underestimate the adverse effects of certain losses over time. Imagine, for example, what it means to be subject to loud ringing in the ears or to persistent headaches. The same points apply to cases in which tortious behavior produces depression or anxiety. In such cases, the hedonic injury is very serious, and significant damage awards are justified (see, for example, *Hall v. Brookshire Bros., Ltd.*, 831 So. 2d 1010 [La. Ct. App. 2002]; *Levy v. Bayou Indus. Maint. Servs.*, 855 So. 2d at 980). Juries and judges might well fail to see this point.

4.2. Capability Damages

If the discussion thus far is correct, awards for pain and suffering, and for hedonic damages, are often inflated from the hedonic point of view. But does this mean that they are inflated from the correct point of view?

The very ideas of “pain and suffering” and “hedonic damages” suggest attention to subjective mental states; the law’s official theory speaks in explicitly hedonic terms. But it is reasonable to think that subjective mental states are not all that matter and that the legal system is attentive to that fact. If an injury causes a significant diminution of cognitive functions, without adversely affecting moods, something has been lost. Let us now shift gears, moving from a purely Benthamite perspective, focused only on subjective mental states, to an Aristotelian one, focused on what people are able to do and to be.

Loss of Capabilities. Suppose that Jones loses the use of a leg; suppose too that the loss does not affect Jones’s self-reported happiness. After a difficult but short period of adjustment, Jones is as happy as he was before the loss. Suppose too that the effort to measure Jones’s moment-by-moment happiness finds that he is no less happy than he was before (see Kahneman et al. 2004). In other words, Jones has experienced no hedonic loss. Should the legal system therefore disregard Jones’s injury?

What Jones has lost is a capability (compare Sen 1985; Nussbaum 2001; Sen 1999).⁷ He cannot walk on his leg; he certainly is unable to run. He is unable to engage in many activities that he used to be able to take for granted. Jones may not be in pain and he may not be suffering. Jones may not be suffering hedonic damage in the sense that no hedoneter can show that Jones enjoys his life less than he did before. Might the legal system nonetheless award damages? If the answer is yes, it is not justified by a hedonic loss. Instead the loss involves a capability. That loss may be real and significant, even if hedonic measures are unable to capture it. Consider, as apparently supporting evidence, the fact that most people would be willing to pay significant amounts to avoid a loss of a capability, even if they could be persuaded that the loss would inflict no hedonic harm.⁸

7. I am not using the idea of capabilities in the same sense as Sen and Nussbaum, but my use belongs in the same general family, focusing as it does on the capacity to function rather than subjective mental states.

8. It is important to see, of course, that whether someone has lost a capability depends on how social institutions react to the relevant losses. If someone has lost the use of a foot, perhaps he is able to use a prosthetic foot, and perhaps the prosthetic foot can function quite well. The same might be true for legs. And even if people are using wheelchairs, the capability loss produced by wheelchair use is a product of how social institutions accommodate people in wheelchairs. One way to understand the Americans with Disabilities Act is to see it as an effort to reduce the risk that impairments will turn into capability losses. Nonetheless, it remains true that many injuries produce significant and long-term losses of that kind even if no long-term hedonic harm is experienced.

The claim on behalf of capability losses is a normative one, based on the objective harm faced by those who lose physical or cognitive abilities. If people have had colostomies or if they are on dialysis machines, they have suffered a significant loss whatever their hedonic state. Consider here two remarkable findings. As we have seen, people with colostomies do not show less happiness than people without colostomies; but at the same time, they say that they would give up to 15 percent of their lives to be able to live without a colostomy (see Loewenstein and Ubel 2006). Similarly, dialysis patients show little adverse hedonic effect, but many of them say that they would willingly yield over half their remaining years in order to have normal kidney function (see Loewenstein and Ubel 2006)! It is possible that these answers indicate a hedonic loss that is not adequately captured by efforts to measure subjective well-being. But they also seem to suggest a concern for capabilities, not merely for hedonic states.

Hedonic Judgment Errors or Recognition of Capabilities? In invoking this evidence, I do not mean to suggest that people's statements on such points should be taken as authoritative.⁹ Begin with the case of healthy people. If such people are horrified at the prospect of having a colostomy, and if they cannot bear the thought of being on a dialysis machine, they might well believe, quite falsely, that the relevant change would make life barely livable; so the evidence suggests (see, for example, Ubel et al. 2001). Hedonic judgment errors of this kind might well be impervious to debiasing (for evidence that some debiasing strategies help and that others do not, see Ubel, Loewenstein, and Jepson 2005). It is imaginable, for example, that people would be willing to demand a great deal to lose a leg, even if they could be given a fully adequate prosthetic (perhaps better than the original) and even if they could be given reliable evidence that they would suffer no hedonic loss after a (brief) period of transition. People's conclusions about what they would pay to avoid or to eliminate a loss might well reflect a hedonic judgment error or a heuristic that is productive of blunders, and if so, those conclusions should not be taken as a basis for policy. If a hedonic judgment error is at work, people are not, in fact, showing an appreciation of capability losses.

The judgments of those who have actually suffered such losses would seem to be entitled to more weight. Because colostomy or dialysis patients would give up significant amounts of their lives to be well, we do

9. This seems to me the tendency in Loewenstein and Ubel (2006).

appear to have reason to think that they are (recognizing that they are) suffering a real loss whatever their hedonic states. Compare a person who has lost cognitive capacities; such a person may believe that he has suffered a real loss even if his hedonic state is good. But it is possible that colostomy or dialysis patients too are vulnerable to focusing illusions, no less than those in Chicago or Cleveland who might be willing to give up a great deal to have the weather enjoyed by people in Los Angeles. Recall that colostomy patients report wildly and inaccurately high levels of happiness before they had colostomies and that people whose colostomies have been reversed say that they were far less happy than they were in fact (see Smith et al. 2006).

In short, I am not claiming that when people say that they want to avoid conditions that do not impose hedonic losses, they are actually motivated by a recognition of capability losses; a hedonic judgment error may well be responsible.¹⁰ My only claim is that when people have lost a capability, they have lost something significant from the normative point of view, even if they have suffered no hedonic loss.

Law and Well-Being. For those who believe that the legal system should accept this view, two difficult questions remain. First, what kinds of capability losses are legally cognizable? Second, how can capabilities be translated into monetary equivalents? At first glance, a notion of normal human functioning would seem to provide the baseline from which to measure capability loss (for discussion, see Satz 2006). It would follow that if someone has lost the use of a leg or an arm, or of cognitive or sexual abilities, a capability loss is involved. I will return below to the question of monetization.

Recognition of the importance of capabilities has broader importance for thinking about well-being, whether it is measured in terms of self-reports involving global life satisfaction (see Frank 2000) or in terms of moment-by-moment measures, designed to capture daily experience (see Kahneman et al. 2004). Those who are able to run, or to have sexual experiences, are better off than those who lack these capabilities, even if the difference cannot be picked up in hedonic terms. Those who are poorly educated have less in the way of capability than those who are well educated, even if hedonic measures cannot identify a difference between the two groups. It is possible that people with less education do not show more negative affect or less positive affect, during their

10. Compare Loewenstein and Ubel (2006), which appears to honor people's judgments even though they might well be based on cognitive errors.

days, than people with a great deal of education (compare Kahneman et al. 2004), but education as such contributes to a richer life. Even if well-educated people do not seem happier according to a hedometer, their enjoyments are more numerous and qualitatively distinct; for good Millian reasons, taken up below, education is valuable whatever its effects on utility, narrowly conceived.

An emphasis on subjective measures is important, because subjective experience matters a great deal. But purely hedonic accounts, focused solely on people's moods, miss aspects of well-being to which sensible societies and legal systems are attuned. It is easy to imagine a group of people who score well on some hedonic measure—perhaps they are all generally at 6, on a scale of 0–8, in terms of positive affect during their days—whose lives are not very good, even in terms of their own considered judgments. As we will see, capabilities are not the only supplement to hedonic measures, but for purposes of what concerns the legal system, they are the most important such supplement.

In a variety of cases, supposedly hedonic damages are probably best justified as capability damages. For example, courts have awarded hedonic damages for loss of the ability to engage in sports (see *Day v. Ouachita Parish School Bd.*, 823 So. 2d at 1044; *Allen v. Wal-Mart Stores, Inc.*, 241 F. 3d at 1297). Hedonic damages have been awarded for the loss of the senses of taste and smell (see *Daugherty v. Erie R.R. Co.*, 169 A. 2d 549 [Pa. Sup. Ct. 1961]). Courts have also awarded significant hedonic damages for the loss of a limb, in a way that may reflect, or be defensible in terms of, a capability loss rather than a hedonic forecasting error (see *Pierce v. N.Y. Cent. R.R. Co.*, 409 F.2d 1392; *Matos v. Clarendon Nat. Ins. Co.*, 808 So. 2d 841). Hedonic damages have been awarded where the tort victim could no longer engage in sexual activities as a result of the injury (see *Varnell v. Louisiana Tech University*, 709 So. 2d at 896). Or consider a case in which the injury rendered the plaintiff mentally retarded; the court awarded hedonic damages for the plaintiff's loss of ability to, among other things, go on a first date, parent children, read, and debate the politics of the day (see *Nemmers v. United States*, 681 F. Supp. 567). It is possible that the court believed that the plaintiff was less happy in some subjective sense. If so, the court might well have been wrong. But the plaintiff lost a capability, indeed a set of capabilities, and might be taken to have deserved damages for that reason.

Consider the possibility that many people who have suffered significant neurological damage are not less happy than they were before;

there is no reason to believe that people with Down's Syndrome are unhappy, and they may in fact be unusually happy. Does it follow that damage awards should be low, or zero, for tortious behavior that has produced certain neurological damage or Down's Syndrome in infants? If loss of capabilities matters, significant damage awards would be justified even without an effect on subjective well-being.

Normative Issues. The idea of capability damages will be puzzling to those with strongly Benthamite inclinations, who think that such well-being is all that matters. And it is true that the term "hedonic damages" has an unmistakably Benthamite ring; if it is using a nonhedonic measure, the legal system is relying on a theory of harm that is not captured by the law's own rubric. My principal suggestion is that many cases that award such damages are best justified on the ground that they reflect an implicit commitment to the importance of capabilities (compare the overlapping conclusions in Bagenstos and Schlanger [forthcoming]). People receive monetary compensation not because they enjoy their lives less but because they have lost a capability. A key question, which a reading of the cases cannot answer, is whether the decisions are animated by some kind of hedonic judgment error or instead an intuitive but sensible judgment about capabilities.

The normative issues are complex, and I can offer only a few brief remarks here. Suppose that Jones has been severely injured and suffers a serious loss in cognitive capacities. Suppose too that the pain and suffering have been modest and that there is little or no loss in subjective well-being. Should Jones receive capability damages? Under the official theory of hedonic damages, the question is whether Jones has suffered a diminution in his enjoyment of life. If that idea is understood in purely hedonic terms, there is a real doubt whether damages should be available; perhaps the relevant hedometers are unable to pick up any loss. But it is plausible to think that Jones has lost some enjoyment of life whatever the (relevant) hedometers say. Jones is now unable to have certain kinds of enjoyments that are available only to those who operate at particular cognitive level. The loss of (the capacity for) those enjoyments ought to matter.

For some of the cases, John Stuart Mill's distinction between higher and lower pleasures is clearly relevant (see Mill 1863). Thus Mill writes, "[I]t is an unquestionable fact that those who are equally acquainted with, and equally capable of appreciating and enjoying, both, do give a most marked preference to the manner of existence which employs their

higher faculties. . . . [No] intelligent human being would consent to be a fool, no instructed person would be an ignoramus, no person of feeling and conscience would be selfish and base, even though they should be persuaded that the fool, the dunce, or the rascal is better satisfied with his lot than they are with theirs” (Mill 1863, chap. 2). When hedonic damages are awarded for the loss of cognitive capacities, judges and juries might well be responding to a logic of this kind. Whether or not they are responding to that logic, significant damage awards are justified for such losses.

If it is correct to emphasize the importance of capabilities, the general argument applies to a wide range of losses, including those that do not involve higher-level cognitive functions. If Jones is unable to engage in sexual relationships or to participate in certain athletic activities, it is plausible to say that his enjoyment of life has been impaired, once the right content has been given to that concept. It is true, however, that use of the idea of capability makes less sense for those losses that are essentially hedonic. If a person was once able to play tennis, but no longer can, is there a genuine loss if no hedometer can identify it? The answer to that question may be “no” even if we are confident that those with serious cognitive impairments, however happy, have lost some of the enjoyment of life. Perhaps the answer is “yes,” because the person has lost an option, and because the option has value. I will return to this issue shortly.

Of course it is true that the category of capability loss does not require plaintiffs to be compensated for any inability to engage in some task. If someone is no longer able to do calligraphy, or to reach the top shelf on her tiptoes, or to hit certain high notes when singing in the shower, compensation may not be justified. (The analysis might be different if the plaintiff is calligrapher or an opera singer.) The task is to identify those losses that are sufficiently basic or foundational to justify a monetary award. Development of a full theory would be a large task, but at a glance at the cases suggest that whatever the content of the theory, losses of a leg, of sexual capacities, of mobility, and of cognitive function are strong candidates for inclusion. Compare in this regard the Americans with Disabilities Act, which labels people “disabled” if they have an impairment that significantly limits “major life activities”; the inquiry into “major life activities” might similarly be understood in terms of capability losses.

4.3. Translating (Hedonic and Capability) Losses into Money

Suppose that Jones has suffered a loss of a leg and that the loss produces a stated hedonic injury. We might agree that the loss is less serious than the loss of both legs but more serious than the loss of three toes. What is the monetary value of the loss? Perhaps the same method can be used to answer that question regardless of whether we are investigating hedonic losses or capability losses.

Willingness to Pay? If we were speaking in economic terms, we might ask how much Jones would be willing to pay to eliminate a 1/100,000 risk of losing the loss of a leg. As we have seen, this is a standard approach in the valuation of mortality and morbidity risks. Suppose that the focus is on Jones's hedonic loss. If so, the discussion thus far should be enough to show that Jones's willingness to pay may reflect a hedonic forecasting error. Perhaps Jones would be willing to pay \$50 to avoid that risk, which implies a loss of \$5 million, even though the hedonic loss from a lost leg would not be terribly serious. Recall that loss aversion itself appears to be a hedonic forecasting error (see Kermer et al. 2006).

Alternatively, suppose that the focus is on Jones's capability loss. Perhaps Jones is concerned that the loss of a leg is a loss of a capability. He might want to pay a certain amount to preserve the option value of having his leg, or he might want to pay that amount to preserve the capability as such. In principle, his willingness to pay might be a good measure of the relevant value. But it is hard to imagine that faced with small probabilities of such losses, people can generate figures that reliably capture the capability values of significant harms, especially in view of the difficulty of measuring the actual effects of such losses before they have occurred.

If the goal of compensation is to restore people to the status quo, then people's willingness to pay, before the fact, is an unreliable measure. The gold standard consists of people's actual experience, and as we have seen, willingness to pay is likely to reflect a hedonic judgment error. In fact, it may be a mistake to rely on people's judgment about necessary compensation even after they are injured. Of course their judgment is least reliable in the period immediately following the injury. At that point, their focus on the injury and its removal may reflect a focusing illusion, no less than when people are asked about the weather. And long after the injury has occurred, a focusing illusion might also distort their judgments, whether we are speaking in hedonic terms or in terms

of capabilities. Recall that colostomy and dialysis patients would pay a great deal (in terms of remaining years of life!) to be well, even though available measures suggest that they are no less happy than they were before.

An argument in favor of willingness to pay might take the following form. The legal system attempts to produce the right deterrent signals. Suppose that people believe, before the fact, that the loss of a limb is terrible and would be willing to pay a great deal to reduce the risk of that loss. Suppose that the legal system awards them a relatively low amount, capturing the actual (as opposed to the wrongly anticipated) loss. Knowing about the prospect of a low award and anticipating the risk of loss, other people, facing that risk, will take extensive precautions against that risk. If so, the willingness-to-pay figure might be used even if it is based on an error, because use of that figure is necessary to avoid those precautions. The argument cannot be ruled out of bounds, but it probably relies on heroic assumptions about the sensitivity of ordinary people to likely awards from the legal system. Accurate awards—sometimes lower and sometimes higher than what people would be willing to pay to avoid—will have behavioral effects at the margin, but it is doubtful that those effects would be large.

Scaling without a Modulus. Loosened from willingness to pay, however, jurors are likely to produce highly unpredictable results. Indeed, the problem of translating hedonic or capability harms into monetary equivalents is a large source of inequality and variability in the legal system. Studies of pain-and-suffering awards show a great deal of noise, in the form of variations unexplained by differences in the cases (see Leebron 1989). The same is true of awards for sexual harassment (Sharkey 2006). Experimental work suggests that some of the unpredictability comes from the fact that when translating injuries into dollars, jurors are being asked to scale without a modulus—that is, to assign monetary values along an unbounded numerical scale without being given a modulus, or standard, by which to establish a meaning for the various points on the scale (see Sunstein, Kahneman, and Schkade 1998; Kahneman, Schkade, and Sunstein 1998).

Imagine, for example, that people are asked to offer a numerical equivalent for the brightness of a light, or the loudness of a noise, on a bounded scale of 0 to infinity. There is every reason to believe that their judgments would have a high degree of unpredictability—not because of disagreement on anything substantial, but because of the nature

of the scale. This problem certainly infects awards for pain and suffering: what is the monetary equivalent of 3 months with migraine headaches, or 6 months of rehabilitation of a broken leg, or back pain for the next 20 years? The same is true for hedonic damages, for jurors are not given a modulus by which to decide on the economic value of some loss of the enjoyment of life. What is the monetary equivalent of the loss of a dog, a limb, cognitive functioning, or sexual capacities? Now suppose that we are not speaking in hedonic terms at all, and the question is the monetary value of a loss of a capability. What is the dollar value of such a loss?

The translation of hedonic or capability losses into monetary equivalents raises daunting problems. But at the very least, it would be valuable to be able to know what is lost in welfare terms, before any attempt is made at translation. My minimal suggestion here has been that judges and juries are likely to make serious blunders in answering the welfare question.

4.4. Toward Civil Damages Guidelines

We can now identify two serious problems in the current situation. First (and this is the more established problem), juries and judges are likely to have difficulty in generating monetary figures to reflect pain, suffering, and loss of enjoyment of life. Because it is difficult to scale without a modulus, and because anchors will have a significant effect, unjustified inequality and excessive and insufficient awards are inevitable. Second (and this is the problem uncovered by the happiness literature), juries and judges are likely to make hedonic judgment errors. My emphasis has been on the second problem, but if we take the two together, we will be inclined to consider large-scale reforms. Proceeding from scratch, no sensible person could possibly want to produce damage awards by asking ordinary people, with little guidance, to assign monetary amounts to losses with which they are unlikely to have had much experience.

The most obvious response would be a set of civil damages guidelines, charged with the task of rationalizing the current situation. The guidelines would place heavy reliance on existing knowledge about hedonic harms, so as to avoid the risk of high awards for illusory losses and low awards for such harms as chronic pain, migraines, anxiety, and depression. To the extent that the short-term hedonic losses are present even when long-term adaptation occurs, the guidelines would take that point into account. To the extent that discrimination and stigma play a role in producing hedonic or other harm, the guidelines would consider that

point as well (see Bagenstos and Schlanger forthcoming). A significant part of the harm of certain injuries consists of the resulting social stigma, on which it might be difficult not to focus and from which both economic and noneconomic injuries may follow. Those injuries deserve to count (Bagenstos and Schlanger forthcoming). Moreover, a large advantage of the guidelines is that they would make it less necessary, and perhaps even unnecessary, for disabled plaintiffs to “perform” their disability or their suffering in court, in a way that could be embarrassing and even humiliating.

The guidelines would also attempt to make sensible translations into monetary equivalents, perhaps by drawing workers’ compensation awards, which reflect a similar attempt at rationalization. Willingness-to-pay figures would provide at least a start here; perhaps the best approach would begin with WTP for hedonic and capability losses and make suitable adjustments when WTP depends on a demonstrable error. Finally, the guidelines would make judgments about capability damages, clearly distinguishing them from hedonic harms.

The development of such guidelines would have a significant technocratic dimension. The goal would not be to build on ordinary intuitions, which are unreliable. It would instead be to incorporate what has been learned about the actual effects of various losses. To the extent that the legal system is concerned with the consequences for subjective well-being, the distinction between persistent and illusory losses would play a key role. In addition, a great deal of attention would have to be paid to ranking capability losses and turning them into monetary equivalents. That task would have a technocratic feature, but it would be inescapably normative. Which capabilities are foundational? How does the loss of an arm compare with the loss of sexual function? For capability losses, reflective judgments, made perhaps by representative and diverse panels, would be most valuable.

If civil damages guidelines were in place, the role of judges and juries would be limited and analogous to that of judges under the Federal Sentencing Guidelines. Attention would continue to be paid to particular circumstances: the loss of a hand is worse for a concert pianist than for a professor of comparative literature. In the criminal context, of course, the Federal Sentencing Guidelines have been subject to vigorous objections; they seem to reflect errors and biases of various sorts, and rule-based systems may not, in the abstract, be better than standard-based alternatives. We cannot entirely exclude the possibility that civil damages guidelines would be even worse than the status quo. But the current

system of awards deserves some kind of award for combining unjustified inequality with cognitive errors. There is every reason to try to do better.

4.5. Broader Lessons

These remarks bear on much larger questions. In this section, I offer some notes on the relationship between happiness on the one hand and willingness to pay and income growth on the other.

Willingness to Pay and Happiness. As I have suggested, many economists and economically oriented lawyers work with the WTP criterion. If people are willing to pay \$50 to eliminate a 1/100,000 risk of losing a foot, there is a good argument that government should start with that number in deciding on appropriate policies. Suppose, however, that people's WTP is a product of a systematic bias, perhaps in the form of a focusing illusion. If so, the connection between WTP and welfare effects will be weakened and possibly very weak (Sunstein 2007). People may be purchasing goods from which they receive little hedonic benefit, and they may be failing to purchase goods from which they receive significant hedonic benefits. (To be sure, people are willing to pay for nonhedonic reasons, as for example when they give to those in need; but often, at least, the motivation is hedonic.) And if this is so, there are serious problems with reliance on WTP, because it operates as a crude proxy for welfare effects, understood in hedonic terms. In short, hedonic forecasting errors raise serious problems for standard ways of conducting cost-benefit analysis.

We can see the point most clearly in connection with contingent-valuation studies. Suppose that people are asked, "How much would you be willing to pay to ensure that climate in your city does not increase by a certain amount by a certain date or to avoid a 1/100,000 chance of losing a finger?" The problem is that such questions specifically focus people on a certain loss and for that reason create a grave risk of a focusing illusion (see Kahneman and Sugden 2005). To the extent that contingent-valuation studies elicit WTP, there is a serious problem.

Perhaps markets will reduce the problem, because the budget constraint, and the full menu of possible expenditures, looms much larger in the market domain than in the circumstances of surveys. Perhaps in their daily lives, people will not suffer serious focusing illusions when deciding how much to pay to reduce risks, because they are alert, at the relevant times, to the opportunity costs of the expenditures. When people have experience and obtain prompt feedback, they are far less likely to

err (Thaler and Sunstein 2008). Nonetheless, sellers of products would very much like to generate focusing illusions in order to ensure that people will buy their products. And it is entirely possible that even in the market domain, WTP reflects a systematic distortion with respect to losses that seem to be significant (but are not) and with respect to losses that seem to be relatively trivial (but are large). A great deal of work remains to be done on this problem, which seems to unsettle many of the standard claims and views in economic analysis of policy and law (for preliminary thoughts, see Sunstein 2007).

Income Growth, Happiness, and Capability. One of the most striking findings in modern social science is that increases in economic growth are not correlated with increases in measures of happiness or reported life satisfaction (see, for example, Layard 2005; Kahneman and Krueger 2006). The United States, France, and Japan all experienced dramatic increases in real income in the twentieth century but showed no increase in subjective well-being (Diener and Suh 2002). An especially striking finding involves China (see Kahneman and Krueger 2006). Between 1994 and 2005, China experienced explosive growth in average real income—250 percent in fact. In that same period, life satisfaction has actually declined, with a reduction in reported satisfaction from 80 percent to 70 percent and an increase in reported dissatisfaction from 21 percent to 35 percent (Kahneman and Krueger 2006).

For purposes of self-reported happiness according to global measures, what appears to matter is relative economic position, not absolute economic position (see Frank 2000). People's self-reported happiness, by global measures, is greatly affected by their position in the economic hierarchy rather than by their absolute wealth. Apparently those who are in a high position, in a relevant hierarchy, impose positional externalities on others, causing hedonic damage (Frank 2000). By contrast, significant shifts in absolute economic position produce little or no hedonic change. From existing evidence, it is odd but not implausible to say that if the gross domestic product (GDP) of America or France doubled in some period of years, we would not pick up any increase in people's life satisfaction. (Return to the case of China.) This conclusion seems counterintuitive but on reflection may not be: Do we really believe that people now living are much happier than people who lived (say) 5 decades earlier and that those who lived 5 decades earlier were happier than those who preceded them? Even when GDP grows every decade, does subjective well-being grow correspondingly? Recall the importance

of attention to people's well-being. Those who have relatively less money, and inferior goods and services, are likely to focus on that fact. But if everyone has more money, and better goods and services, people are less likely to attend to the improvement. The problem, for those who believe that subjective well-being is our lodestar, is that existing evidence suggests that economic growth is not a good way to increase national well-being.

I have noted that some people believe that what matters is not global measures of happiness but measures of moment-by-moment happiness. Perhaps global measures are a crude way of capturing what really matters, which is happiness as it is actually experienced (see Kahneman et al. 2004). But even if this is so, absolute income is a poor measure of moment-by-moment happiness; across a certain threshold, there is no evidence that wealth is correlated with positive affect or with an absence of negative affect (see Kahneman et al. 2004, 2007). Even relative economic position, though correlated with global measures, is not correlated with measures of moment-by-moment happiness (Kahneman et al. 2004)—findings that again suggest the importance of attention. We might therefore conclude that whether global or moment-by-moment measures are the appropriate guide, economic growth does not much matter to people's welfare.

But there is an important qualification. From the discussion thus far, it should be clear that self-reported happiness is not the only thing that is important, even if welfare, properly understood, is our lodestar. Happiness may not increase with growth in GDP, but one result of GDP growth may well be increases in longevity, health, and opportunity.¹¹ From the standpoint of increasing human welfare, it is good to enable people to live 80 healthy years than 40 less healthy years, even if their level of daily happiness does not increase. If increases in GDP are correlated with longer and healthier lives, and with better opportunities and greater education, such increases appear to promote welfare even if subjective happiness stays constant. Recall here the view that capabilities have independent importance. To the extent that increases in GDP increase literacy, promote health, and ensure greater opportunity, they are valuable whatever happens to subjective happiness.

This point receives indirect support from some intriguing differences

11. For discussion, see Sen (1985). Sen argues that the concern should be capabilities, not economic growth, but it is nonetheless true that growth is (imperfectly) correlated with improvements in capabilities.

between measures of global life satisfaction and measures of moment-by-moment happiness. For example, global life satisfaction is positively affected by whether one is married, has children, or is wealthy—but moment-by-moment happiness is not. (In fact, divorced women report both lower life satisfaction and higher moment-by-moment happiness than married women; see Kahneman et al. 2004.) It is tempting to think that the moment-by-moment measures are more accurate, because they are more reliable than global measures, which seem to be a stab in the dark. Consider the fact that experimenters can easily prime those who answer general questions about happiness or life satisfaction, for example, by asking them first how many dates they have had in the past month (see Kahneman and Krueger 2006). Such questions significantly affect reported life satisfaction. Perhaps those who are not specifically primed engage in a kind of self-priming, asking certain questions (am I married, do I have children, or am I wealthy?) in a way that produces inaccurate measures of how happy they are in fact. On this view, moment-by-moment measures are far better; if people are saddened by asking questions about their global life satisfaction, their sadness should matter only to the extent that it shows up in their actual experience.

On a different view, however, global measures produce not inaccurate proxies but more reflective judgments, in which people assess how well their lives are actually going. It is easy to imagine somewhat negative answers to that question despite high levels of moment-by-moment happiness, produced by hedonically good lives in which people see friends a great deal, have long vacations, and greatly enjoy their days. Such people might nonetheless conclude that their lives are not particularly satisfying, perhaps because they lack depth or meaning. Similarly, it is easy to imagine highly positive reactions to global life satisfaction questions despite not-high levels of moment-by-moment happiness. The high levels of life satisfaction and the not-high levels of moment-by-moment happiness might be produced by lives in which people work hard, serve others, and have a great deal of stress.

I am not insisting that, in fact, most people are giving reflective answers to questions about global life satisfaction, offering a mixture of judgments about their moods, their capabilities, and their assignments of meaning. What is clear is that even if social gains along various dimensions do not register on either global or moment-by-moment measures, they should nonetheless count as gains; consider a population that is better educated, significantly healthier, and given more options about

what to do with their lives. If economic growth produces those gains, it is valuable even if it does not have significant hedonic effects.

But if the goal really is welfare, we might pursue the relevant ends directly and focus on economic growth only to the extent that it is responsible or a good proxy for the relevant improvements. If the evidence on subjective happiness is taken seriously, the consequences for law and policy would appear to be significant, because economic growth would be demoted to a secondary matter, to be promoted only to the extent that it helps achieve primary goals, which might in any case be pursued directly (see Kahneman and Krueger 2006, pp. 18–21).

A Note on Meaning. I have mentioned the idea of meaning, and that idea deserves independent analysis. If someone loses cognitive capacities, the loss is not only one of a capability; his life also becomes less meaningful. And if someone is usually in a good mood, perhaps because life is constantly fun, he might nonetheless think, on reflection, that his activities are superficial or even silly and that something is missed by moment-by-moment measures of his moods. A global life satisfaction question might, in principle, pick up this concern, but perhaps people take that question in hedonic terms. And even if an absence of meaning is not reflected in people's answers to survey questions or to subjectively felt experience, it nonetheless matters; much fiction, most prominently Aldous Huxley's *Brave New World*, explores that point. Perhaps some damage awards can be justified as reflecting meaning loss (though here again monetization is extremely difficult).

Whether or not this is so, we can now see an additional difficulty with purely hedonic measures. Those who are always in happy moods may nonetheless be missing an important ingredient of well-being. Happiness, understood in hedonic terms, does matter a great deal, but well-being includes heterogeneous and plural goods.

CONCLUSION

In many contexts, the legal system requires people to make difficult hedonic judgments. If people make serious hedonic judgment errors in their own lives, it is highly likely that juries and judges will make equivalent errors. In particular, there is a serious risk that adjudicative institutions will significantly overestimate the hedonic losses associated with certain injuries. The exaggerations stem in part from a failure to appreciate people's powers of adaptation (adaptation neglect); they also

stem from the kind of focusing illusion that people demonstrate when thinking about the effects of weather. Often apparently significant losses turn out to be illusory, at least if they are understood in hedonic terms.

There are two particular implications. The first is that those involved in awarding damages must clearly distinguish between those injuries that involve persistent harm and those injuries that do not. Some injuries fall within the same category as unpleasant noises, to which people do not adapt and on which people cannot help but focus; other injuries, such as the loss of toes, inflict little hedonic harm. The second implication is that capability damages deserve independent analysis. Even if little or no hedonic loss is suffered, it is reasonable to conclude that people deserve to be compensated in the event of a loss or serious injury to capabilities.

I have suggested that the legal system now suffers from serious problems in making hedonic judgments and in translating hedonic and capability losses into monetary equivalents. The natural response is a set of civil damages guidelines, incorporating sensible assessments of monetization, the best available information about hedonic effects, and reflective judgments about capability losses.

It should be clear that these points have implications for how policy-makers might think about a range of questions outside of the domain of adjudication. These include the limits of the willingness-to-pay criterion, the value of national income growth, and appropriate priority setting for governments concerned to improve social well-being. The minimal conclusion is that if hedonic states matter, governments should give far higher priority than they now do to the relief of mental illness and chronic pain.¹² More generally, it would not be surprising if governments make significant hedonic judgment errors in fiscal and regulatory policy. If so, efforts to correct the resulting errors would produce major welfare gains.

REFERENCES

- Bagenstos, Samuel, and Margo Schlanger. 2007. Hedonic Damages, Hedonic Adaptation, and Disability. *Vanderbilt Law Review* 60:745–87.
- Bateman, Ian J., and Kenneth G. Willis. 1999. *Valuing Environmental Preferences*. New York: Oxford University Press.

12. To the extent that certain conditions are accompanied by stigma, and to the extent that stigma imposes continuing hedonic harm, the analysis should be similar.

- Berla, Edward P., Michael L. Brookshire, and Stun V. Smith. 1990. Hedonic Damages and Personal Injury: A Conceptual Approach. *Journal of Forensic Economics* 3:1–8.
- Bovbjerg, Randall R., Frank A. Sloan, and James F. Blumstein. 1989. Valuing Life and Limb in Tort: Scheduling Pain and Suffering. *Northwestern University Law Review* 83:908–76.
- Clark, Andrew E., Ed Diener, Yannis Georgellis, and Richard E. Lucas. 2003. Lags and Leads in Life Satisfaction: A Test of the Baseline Hypothesis. Working Paper No. 2003–14. CNRS and DELTA-Federation Jourdan, Paris.
- Diener, Edward, and E. Suh. 2002. National Differences in Subjective Well-Being. Pp. 438–41 in *Well-Being: The Foundations of Hedonic Psychology*, edited by Daniel Kahneman, Ed Diener, and Norbert Schwarz. New York: Russell Sage Foundation.
- Easterlin, Richard. 2003. *Building a Better Theory of Well-Being*. Discussion Paper No. 742. IZA, Bonn.
- Elster, John. 1983. *Sour Grapes: Studies in the Subversion of Rationality*. New York: Cambridge University Press.
- Frank, Robert. 2000. *Luxury Fever: Money and Happiness in an Era of Excess*. Princeton, N.J.: Princeton University Press.
- Frederick, Shane, and George Loewenstein. 1999. Hedonic Adaptation. Pp. 303–11 in *Well-Being: The Foundations of Hedonic Psychology*, edited by Daniel Kahneman, Ed Diener, and Norbert Schwarz. New York: Russell Sage Foundation.
- Frey, Bruno S., and Alois Stutzer. 2002. *Happiness and Economics: How the Economy and Institutions Affect Human Well-Being*. Princeton, N.J.: Princeton University Press.
- Gilbert, Daniel. 2006. *Stumbling on Happiness*. New York: Alfred A. Knopf.
- Gilbert, Daniel, Elizabeth C. Pinel, Timothy D. Wilson, Stephen J. Blumberg, and Thalia P. Wheatley. 1998. Immune Neglect: A Source of Durability Bias in Affective Forecasting. *Journal of Personality and Social Psychology* 75: 617–38.
- Gilbert, Daniel, and Timothy Wilson. 2000. Miswanting: Some Problems in the Forecasting of Future Affective States. Pp. 178–97 in *Feeling and Thinking: The Role of Affect in Social Cognition*, edited by Joseph Forgas. New York: Cambridge University Press.
- Kahneman, Daniel, Ed Diener, and Norbert Schwarz, eds. 1999. *Well-Being: The Foundations of Hedonic Psychology*. New York: Russell Sage Foundation.
- Kahneman, Daniel, and Alan Krueger. 2006. Developments in the Measurement of Subjective Well-Being. *Journal of Economic Perspectives* 20:3–24.
- Kahneman, Daniel, Alan Krueger, David Schkade, Amy Kirilla, and Claude Fischler. 2007. The Structure of Well-Being in Two Cities. Unpublished manuscript. Princeton University, Woodrow Wilson School of Public and International Affairs, Princeton, N.J.

- Kahneman, Daniel, Alan B. Krueger, David A. Schkade, Norbert Schwarz, and Arthur A. Stone. 2004. A Survey Method for Characterizing Daily Life Experience: The Day Reconstruction Method. *Science* 3:1776–80.
- Kahneman, Daniel, David Schkade, and Cass Sunstein. 1998. Shared Outrage and Erratic Awards: The Psychology of Punitive Damages. *Journal of Risk and Uncertainty* 16:49–86.
- Kahneman, Daniel, and Robert Sugden. 2005. Experienced Utility as a Standard of Policy Evaluation. *Environmental and Resource Economics* 32:161–81.
- Kahneman, Daniel, and Richard Thaler. 2006. Anomalies: Utility Maximization and Expected Utility. *Journal of Economic Perspectives* 20:221–34.
- Kermer, Deborah A., Erin Driver-Linn, Timothy D. Wilson, and Daniel T. Gilbert. 2006. Loss Aversion Is an Affective Forecasting Error. *Psychological Science* 17:649–53.
- Korobkin, Russell. 2003. The Endowment Effect and Legal Analysis. *Northwestern University Law Review* 97:1227–94.
- Layard, Richard. 2005. *Happiness: Lessons From a New Science*. New York: Penguin Press.
- Leebron, David. 1989. Final Moments: Damages for Pain and Suffering Prior to Death. *New York University Law Review* 64:256–363.
- Loewenstein, George, and Peter Ubel. 2006. Hedonic Adaptation and the Role of Decision and Experience Utility in Public Policy. Paper presented at the conference Happiness and Public Economics, London, September.
- McCaffery, Edward J., Daniel J. Kahneman, and Matthew L. Spitzer. 1995. Framing the Jury: Cognitive Perspectives in Pain and Suffering Awards. *Virginia Law Review* 81:1341–1420.
- Mill, John Stuart. 1863. *Utilitarianism*. London: Parker, Son, & Bourn.
- Nussbaum, Martha. 1996. *The Therapy of Desire: Theory and Practice in Hellenistic Ethics*. New York: Cambridge University Press.
- . 1999. *Women and Human Development: The Capabilities Approach*. New York: Cambridge University Press.
- . 2001. *Women and Human Development*. New York: Cambridge University Press.
- Oswald, Andrew, and Powdthavee Nattavudh. 2005. *Does Happiness Adapt? A Longitudinal Study of Disability with Implications for Economists and Judges*. Unpublished manuscript. University of Warwick, Department of Economics, Warwick.
- Rodgers, Gregory. 1993. Estimating Jury Compensation for Pain and Suffering in Product Liability Cases Involving Nonfatal Personal Injury. *Journal of Forensic Economics* 6:251–62.
- Samaha, Adam. 2007. What Is The Social Model Good For? Unpublished manuscript. University of Chicago Law School, Chicago.
- Satz, Ani B. 2006. A Jurisprudence of Dysfunction: On the Role of “Normal

- Species Functioning” in Disability Analysis. *Yale Journal of Health Policy, Law and Ethics* 6:221–67.
- Schkade, David, and Daniel Kahneman. 1998. *Does Living in California Make People Happy?* *Psychological Science* 9:340–46.
- Sen, Amartya. 1985. *Commodities and Capabilities*. New York: Elsevier Science.
- . 1999. *Development as Freedom*. New York: Knopf.
- Sharkey, Catherine M. 2006. Dissecting Damages: An Empirical Exploration of Sexual Harassment Awards. *Journal of Empirical Legal Studies* 3:1–45.
- Smith, Dylan M., Ryan L. Sheriff, Laura Damschroder, George Loewenstein, and Peter A. Ubel. 2006. Misremembering Colostomies: Former Patients Give Lower Utility Ratings Than Do Current Patients. *Health Psychology* 25: 688–95.
- Sunstein, Cass R. 2007. Willingness to Pay vs. Welfare. *Harvard Law and Policy Review* 1:303–30.
- Sunstein, Cass R., Daniel Kahneman, and David Schkade. 1998. Assessing Punitive Damages (with Notes on Cognition and Valuation in Law). *Yale Law Journal* 107:2071–2154.
- Thaler, Richard. 1991. *Quasi Rational Economics*. New York: Russell Sage Foundation.
- Thaler, Richard A., and Cass R. Sunstein. 2008. *Nudge: Improving Decisions through the Science of Choice*. New Haven, Conn.: Yale University Press.
- Ubel, Peter A., and George Loewenstein. 2008. Pain and Suffering Awards: They Shouldn’t Be (Just) about Pain and Suffering. *Journal of Legal Studies* 37: S195–S216.
- Ubel, Peter A., George Loewenstein, John Hershey, Jonathan Baron, Tara Mohr, David A. Asch, and Christopher Jepson. 2001. Do Nonpatients Underestimate the Quality of Life Associated with Chronic Health Conditions Because of a Focusing Illusion? *Medical Decision Making* 21:190–99.
- Ubel, Peter A., George Loewenstein, and Christopher Jepson. 2003. Whose Quality of Life? A Commentary Exploring Discrepancies between Health State Evaluations of Patients and the General Public. *Quality of Life Research* 12: 599–607.
- . 2005. Disability and Sunshine: Can Hedonic Predictions Be Improved by Drawing Attention to Focusing Illusions or Emotional Adaptation? *Journal of Experimental Psychology Applied* 11:111–23.
- Viscusi, W. Kip. 1988. Pain and Suffering in Product Liability Cases: Systematic Compensation or Capricious Awards? *International Review of Law and Economics* 8:203–20.
- . 1994. *Fatal Tradeoffs*. New York: Oxford University Press.
- . 1998. *Rational Risk Policy*. New York: Oxford University Press.
- Weinstein, Neil D. 1982. Community Noise Problems: Evidence against Adaptation. *Journal of Environmental Psychology* 2:87–97.