CHAPTER 7

Psychic Numbing and Mass Atrocity

PAUL SLOVIC
DAVID ZIONTS
ANDREW K. WOODS
RYAN GOODMAN
DEREK JINKS

The means for expressing cruelty and carrying out mass killing have been fully developed. It is too late to stop the technology. It is to the psychology that we should now turn.

-Jonathan Glover, Humanity, 2001, p. 144

The twentieth century is often said to have been the bloodiest century in recorded history. In addition to its wars, it witnessed many grave and widespread human rights abuses. But what stands out in historical accounts of those abuses, perhaps even more than the cruelty of their perpetration, is the inaction of bystanders. Why do people and their governments repeatedly fail to react to genocide and other mass-scale human rights violations?

There is no simple answer to this question. It is not because people are insensitive to the suffering of their fellow human beings—witness the extraordinary efforts an individual will expend to rescue a person in distress. It is not because people only care about identifiable victims of similar skin color who live nearby: witness the outpouring of aid from the north to the victims of the December 2004 tsunami in Southeast Asia. Nor can the blame be apportioned entirely to political leaders. Although President George W. Bush was unresponsive to the murder of hundreds of thousands of people in Darfur, it was his predecessor, President Bill Clinton, who ignored the genocide in Rwanda, and President Franklin D. Roosevelt who for too long did little to stop the Holocaust. The American example of inaction has been largely repeated in other countries as well. Behind every leader who ignored mass murder were millions of citizens whose indifference allowed the inaction to pass.

Every episode of mass murder is distinct and raises unique social, economic, military, and political obstacles to intervention. We therefore recognize that geopolitics, domestic politics, or failures of individual leadership have been important factors in particular episodes. But the repetitiveness of such atrocities, which have been ignored by powerful people and nations and by the general public, calls for explanations that may reflect some fundamental deficiency in our humanity—a deficiency not in our intentions, but in our very hardware, and a deficiency that once identified might possibly be overcome.

One fundamental mechanism that may play a role in many, if not all, episodes of mass-abuse neglect involves the capacity to experience affect, the positive and negative feelings that combine with reasoned analysis to guide our judgments, decisions, and actions. Research shows that the statistics of mass rights violations or genocide, no matter how large the numbers, fail to convey the true meaning of such atrocities. The numbers fail to spark emotion or feeling and thus fail to motivate action. The genocide in Darfur is real, but we do not "feel" that reality. We examine below ways that we might make genocide "feel real" and motivate appropriate interventions. Ultimately, however, we conclude that we cannot only depend on our intuitive feelings about these atrocities. In addition, we must create and commit ourselves to in-

Slovic, P., Zionts, D., Woods, A. K., Goodman, R., & Jinks, D. (2013). Psychic numbing and mass atrocity. In E. Shafir (Ed.), The behavioral foundations of public policy (pp. 126–142). NJ: Princeton University Press.

stitutional, legal, and political responses based upon reasoned analysis of our moral obligations to stop large-scale human rights violations.

Lessons from Psychology

In 1994, Roméo Dallaire, the commander of the tiny UN peacekeeping mission in Rwanda, was forced to watch helplessly as the slaughter he had foreseen and warned about began to unfold. Writing of this massive humanitarian disaster a decade later, he encouraged scholars "to study this human tragedy and to contribute to our growing understanding of the genocide. If we do not understand what happened, how will we ever ensure it does not happen again?" (Dallaire, 2005, p. 548).

Researchers in psychology, economics, and a multidisciplinary field called behavioral decision theory have developed theories and findings that, in part, begin to explain the pervasive underresponse to atrocity.

Affect, Attention, Information, and Meaning

The search to identify a fundamental mechanism in human psychology that causes us to ignore mass murder and genocide draws upon a theoretical framework that describes the importance of emotions and feelings in guiding decision making and behavior. Perhaps the most basic form of feeling is affect, the sense (not necessarily conscious) that something is good or bad. Positive and negative feelings occur rapidly and automatically—note how quickly it takes to sense the feelings associated with the word joy or the word hate. A large research literature in psychology has documented the importance of affect in conveying meaning upon information and motivating behavior (Barrett and Salovey, 2002; Clark and Fiske, 1982; Forgas, 2000; Le Doux, 1996; Mowrer, 1960; Tomkins, 1962, 1963; Zajonc, 1980). Without affect, information lacks meaning and will not be used in judgment and decision making (Loewenstein et al., 2001; Slovic et al., 2002).

Affect plays a central role in what are known as "dual-process theories" of thinking. As Epstein (1994) observed, "There is no dearth of evidence in every day life that people apprehend reality in two fundamentally different ways, one variously labeled intuitive, automatic, natural, nonverbal, narrative, and experiential, and the other analytical, deliberative, verbal, and rational" (p. 710).

Stanovich and West (2000) labeled these two modes of thinking System 1 and System 2. One of the characteristics of System 1, the experiential or intuitive system, is its affective basis. Although analysis (System 2) is certainly important in many decisionmaking circumstances, reliance on affect and emotion is generally a quicker, easier, and more efficient way to navigate in a complex, uncertain, and sometimes dangerous world. Many theorists have given affect a direct and primary role in motivating behavior.

Underlying the role of affect in the experiential system is the importance of images, to which positive or negative feelings become attached. Images in this system include not only visual images, important as these may be, but words, sounds, smells, memories, and products of our imagination.

Kahneman (2003) noted that one of the functions of System 2 is to monitor the quality of the intuitive impressions formed by System 1. Kahneman and Frederick (2002) suggested that this monitoring is typically rather lax and allows many intuitive judgments to be expressed in behavior, including some that are erroneous. This point has important implications that will be discussed later.

In addition to positive and negative affect, more nuanced feelings such as empathy, sympathy, compassion, and sadness have been found to be critical for motivating people to help others (Coke, Batson, and McDavis, 1978; Dickert and Slovic, 2009; Eisenberg and Miller, 1987). As Batson (1990) put it, "considerable research suggests that we are more likely to help someone in need when we 'feel for' that person." (p. 339).

A particularly important psychological insight comes from Haidt (2001, 2007; see also Van Berkum et al., 2009), who argued that moral intuitions (akin to System 1) precede moral judgments. Specifically, he asserted that

moral intuition can be defined as the sudden appearance in consciousness of a moral judgment, including an affective valence (good-bad, like-dislike) without any conscious awareness of having gone through steps of searching, weighing evidence, or inferring a conclusion. Moral intuition is therefore . . . akin to aesthetic judgment. One sees or hears about a social event and one instantly feels approval or disapproval. (p. 818)

In other words, feelings associated with moral intuition usually dominate moral judgment, unless we make an effort to use judgment to critique and, if necessary, override intuition. Not that our moral intuitions are not, in many cases, sophisticated and accurate. They are much like human visual perception in this regard—equipped with shortcuts that most of the time serve us well but occasionally lead us seriously astray (Kahneman, 2003). Indeed, like perception, which is subject under certain conditions to visual illusions, our moral intuitions can be very misguided. We shall demonstrate this in the following sections

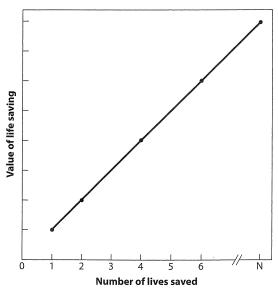
and argue that, in particular, our intuitions fail us in the face of genocide and mass atrocities. That failure points to the need to create laws and institutions that are designed to stimulate reasoned analysis and that can help us overcome the deficiencies in our ability to *feel* the need to act.

Affect, Analysis, and the Value of Human Lives

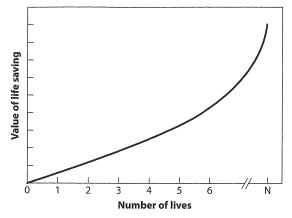
How *should* we value the saving of human lives? A System 2 answer would look to basic principles or fundamental values for guidance. For example, Article 1 of the United Nations Universal Declaration of Human Rights asserts, "All human beings are born free and equal in dignity and rights." We might infer from this that every human life is of equal value. If so, the value of saving N lives is N times the value of saving one life, as represented by the linear function in figure 7.1.

An argument can also be made for judging large losses of life to be disproportionately more serious because they threaten the social fabric and viability of a group or community, as in genocide (fig. 7.2). Debate can be had at the margins over whether governments have a duty to give more weight to the lives of their own people, but something approximating the equality of human lives is rather uncontroversial.

How *do* we actually value human lives? Research provides evidence in support of two descriptive models, which are linked to affect and intuitive, System 1 thinking, that reflect values for lifesaving that are pro-



7.1. A normative model for valuing the saving of human lives. Every human life is of equal value.



7.2. Another normative model: large losses threaten the viability of the group or society.

foundly different from the normative models shown in figures 7.1 and 7.2. Both of these descriptive models demonstrate responses that are insensitive to large losses of human life and consistent with apathy toward genocide.

The Psychophysical Model

Affect is a remarkable mechanism that enabled humans to survive the long course of evolution. Before there were sophisticated analytic tools such as probability theory, scientific risk assessment, and cost/benefit calculus, humans used their senses, honed by experience, to determine whether the animal lurking in the bushes was safe to approach or the murky water in the pond was safe to drink. Simply put, System 1 thinking evolved to protect individuals and their small family and community groups from present, visible, immediate dangers. This affective system, however, did not evolve to help us respond to distant, mass murder. As a result, System 1 thinking responds to large-scale atrocities in ways that System 2 deliberation, if activated, finds reprehensible.

Fundamental qualities of human behavior are, of course, recognized by others beside scientists. The American writer Annie Dillard (1999) cleverly demonstrated the limitation of our affective system as she sought to help us understand the humanity of the Chinese nation: "There are 1,198,500,000 people alive now in China. To get a *feel* for what this *means*, simply take yourself—in all your singularity, importance, complexity, and love—and multiply by 1,198,500,000. See? Nothing to it" (p. 47, italics added).

We quickly recognize that Dillard was joking when she asserted "nothing to it." We know, as she did, that we are incapable of feeling the humanity behind the number 1,198,500,000. The circuitry in our brain is not up to this task. This same incapacity was purportedly echoed by the Nobel Prize-winning biochemist Albert Szent-Györgyi as he struggled to comprehend the possible consequences of nuclear war: "I am deeply moved if I see one man suffering and would risk my life for him. Then I talk impersonally about the possible pulverization of our big cities, with a hundred million dead. I am unable to multiply one man's suffering by a hundred million."

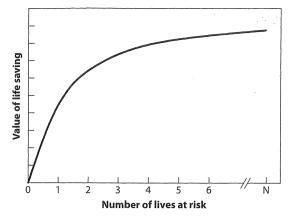
There is considerable evidence that our affective responses and the resulting value we place on saving human lives may follow the same sort of "psychophysical function" that characterizes our diminished sensitivity to a wide range of perceptual and cognitive entities—brightness, loudness, heaviness, and money as their underlying magnitudes increase.

What psychological principle lies behind this insensitivity? In the nineteenth century, E. H. Weber (1834) and Gustav Fechner (1860/1912) discovered a fundamental psychophysical principle that describes how we perceive changes in our environment. They found that people's ability to detect changes in a physical stimulus rapidly decreases as the magnitude of the stimulus increases. What is known today as Weber's law states that in order for a change in a stimulus to become just noticeable, a fixed percentage must be added. Thus, perceived difference is a relative matter. To a small stimulus, only a small amount must be added to be noticeable. To a large stimulus, a large amount must be added. Fechner proposed a logarithmic law to model this nonlinear growth of sensation. Numerous empirical studies by S. S. Stevens (1975) have demonstrated that the growth of sensory magnitude (ψ) is best fit by a power function of the stimulus magnitude φ,

$$\psi = k \varphi \beta$$
,

where the exponent β is typically less than one for measurements of phenomena such as loudness, brightness, and even the value of money (Galanter, 1962). For example, if the exponent is 0.5, as it is in some studies of perceived brightness, a light that is four times the intensity of another light will be judged only twice as bright.

Remarkably, the way that numbers are represented mentally may also follow the psychophysical function. Dehaene (1997) described a simple experiment in which people are asked to indicate which of two numbers is larger: 9 or 8? 2 or 1? Everyone gets the answers right, but it takes more time to identify 9 as larger than 8 than to indicate 2 is larger than 1. From experiments such as this, Dehaene concluded that "our brain represents quantities in a fashion not un-



7.3. A psychophysical model describing how the saving of human lives may actually be valued.

like the logarithmic scale on a slide rule, where equal space is allocated to the interval between 1 and 2, 2 and 4, or between 4 and 8" (p. 76). Numbers 8 and 9 thus seem closer together or more similar than 1

Our cognitive and perceptual systems seem designed to sensitize us to small changes in our environment, possibly at the expense of making us less able to detect and respond to large changes. As the psychophysical research indicates, constant increases in the physical magnitude of a stimulus typically evoke smaller and smaller changes in response. Applying this principle to the valuing of human life suggests that a form of psychophysical numbing may result from our inability to appreciate losses of life as they become larger (fig. 7.3). The function in figure 7.3 represents a value structure in which the importance of saving one life is great when it is the first, or only, life saved but diminishes marginally as the total number of lives saved increases. Thus, psychologically, the importance of saving one life is diminished against the background of a larger threat—we will likely not "feel" much difference, nor value the difference, between saving 87 lives and saving 88.

Kahneman and Tversky (1979) incorporated this psychophysical principle of decreasing sensitivity into prospect theory, a descriptive account of decision making under uncertainty. A major element of prospect theory is the value function, which relates subjective value to actual gains or losses. When applied to human lives, the value function implies that the subjective value of saving a specific number of lives is greater for a smaller tragedy than for a larger one.

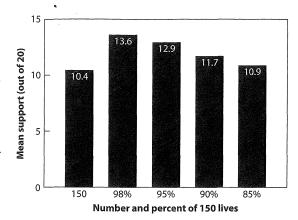
Fetherstonhaugh et al. (1997) demonstrated this potential for diminished sensitivity to the value of life—that is, psychophysical numbing—in the context

of evaluating people's willingness to fund various lifesaving interventions. In a study involving a hypothetical grant-funding agency, respondents were asked to indicate the number of lives a medical research institute would have to save to merit receipt of a \$10 million grant. Nearly two-thirds of the respondents raised their minimum benefit requirements to warrant funding when there was a larger at-risk population, with a median value of 9,000 lives needing to be saved when 15,000 were at risk, compared to a median of 100,000 lives needing to be saved out of 290,000 at risk. By implication, respondents saw saving 9,000 lives in the smaller population as more valuable than saving ten times as many lives in the larger population.

Other studies in the domain of lifesaving interventions have documented similar psychophysical numbing or proportional reasoning effects (Baron, 1997; Bartels and Burnett, 2006; Fetherstonhaugh et al., 1997; Friedrich et al., 1999; Jenni and Loewenstein, 1997; Ubel, Baron, and Asch, 2001). For example, Fetherstonhaugh et al. (1997) also found that people were less willing to send aid that would save 4,500 lives in Rwandan refugee camps as the size of the camps' at-risk population increased. Friedrich et al. (1999) found that people required more lives to be saved to justify mandatory antilock brakes on new cars when the alleged size of the at-risk pool (annual braking-related deaths) increased.

These diverse studies of lifesaving demonstrate that the *proportion* of lives saved often carries more weight than the *number* of lives saved when people evaluate interventions. Thus, extrapolating from Fetherstonhaugh et al., one would expect that, in separate evaluations, there would be more support for saving 80% of 100 lives at risk than for saving 20% of 1,000 lives at risk. This is consistent with an affective (System 1) account, in which the number of lives saved conveys little affect but the proportion saved carries much feeling: 80% is clearly "good" and 20% is "poor."

Slovic et al. (2004), drawing upon the finding that proportions appear to convey more feeling than do numbers of lives, predicted (and found) that college students, in a between-groups design, would more strongly support an airport-safety measure expected to save 98% of 150 lives at risk than a measure expected to save 150 lives. Saving 150 lives is diffusely good, and therefore somewhat hard to evaluate, whereas saving 98% of something is clearly very good because it is so close to the upper bound on the percentage scale and hence is highly weighted in the support judgment. Subsequent reduction of the percentage of 150 lives that would be saved to 95%, 90%, and 85% led to reduced support for the safety measure, but each of these percentage conditions still garnered a higher mean level of support than did the "save 150 lives" condition (fig. 7.4).



7.4. Airport safety study: saving a percentage of 150 lives receives higher support ratings than does saving 150 lives.

Note: Bars describe mean responses to the question, How much would you support the proposed measure to purchase new equipment? The response scale ranged from 0 (would not support at all) to 20 (very strong support).

(Data derived from table 23.4, page 408, from chapter 23, "The Affect Heuristic," Slovic et al., *Heuristics and Biases: The Psychology of Intuitive Judgment*, edited by Thomas Gilovich, Dale Griffin and Daniel Kahneman. Copyright © 2002, Cambridge University Press. Adapted with permission.)

This research on psychophysical numbing is important because it demonstrates that the feelings necessary for motivating lifesaving actions are not congruent with the normative models in figures 7.1 and 7.2. The nonlinearity displayed in figure 7.3 is consistent with the disregard of incremental loss of life against a background of a large tragedy. However, it does not fully explain apathy toward genocide, because it implies that the response to initial loss of life will be strong and maintained, albeit with diminished sensitivity, as the losses increase. Evidence for a second descriptive model, better suited to explain apathy toward genocide, follows.

Numbers and Numbness: Images and Feeling

Psychological theories and data confirm what keen observers of human behavior have long known. Numerical representations of human lives do not necessarily convey the importance of those lives. All too often the numbers represent dry statistics, "human beings with the tears dried off," that lack feeling and fail to motivate action (Slovic and Slovic, 2004).

How can we impart the feelings that are needed for rational action? Attempts to do this typically involve highlighting the images that lie beneath the



7.5. Flags depicting American and Iraqi war dead. (Reprinted from "Affect, Moral Intuition, and Risk," Slovic, Paul, and Daniel Västfjäll, Psychological Inquiry, 21(4), 1.10.2010. Reprinted by permission of Taylor & Francis Ltd.)

numbers. For example, organizers of a rally designed to get Congress to do something about 38,000 deaths a year from handguns piled 38,000 pairs of shoes in a mound in front of the Capitol (Associated Press, 1994). Students at a middle school in Tennessee, struggling to comprehend the magnitude of the Holocaust, collected six million paper clips as a centerpiece for a memorial (Schroeder and Schroeder-Hildebrand, 2004). Flags were "planted" on the lawn of the University of Oregon campus to represent the thousands of American and Iraqi war dead (fig. 7.5).

When it comes to eliciting compassion, the identified individual victim, with a face and a name, has no peer. Psychological experiments demonstrate this clearly, but we all know it as well from personal experience and media coverage of heroic efforts to save individual lives. The world watched tensely as rescuers worked for several days to rescue 18-month-old Jessica McClure, who had fallen 22 feet into a narrow abandoned well shaft. Charities such as Save the Children have long recognized that it is better to endow a donor with a single, named child to support than to ask for contributions to the bigger cause.

Even Adolf Eichmann, complicit in the murder of millions of Jews during the Holocaust, exhibited an emotional connection to one of his victims after being interrogated by the victim's son for hundreds of hours during his 1961 trial in Israel. When the interrogator, Captain Avner Less, reveals to Eichmann that his father had been deported to Auschwitz by Eichmann's headquarters, Eichmann cried out, "But that's horrible, Herr Captain! That's horrible!" (von Lang, 1983, p. ix).

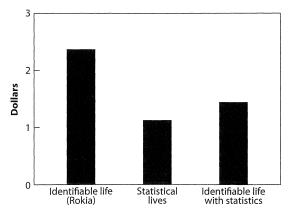
But the face need not even be human to motivate powerful intervention. A dog stranded aboard a tanker adrift in the Pacific was the subject of one of the most costly animal rescue efforts ever (Vedantam, 2010). Hearing this, the columnist Nicholas Kristof

(2007) recalled cynically that a single hawk, Pale Male, evicted from his nest in Manhattan, aroused more indignation than two million homeless Sudanese. He observed that what was needed to galvanize the American public and their leaders to respond to the genocide in Darfur was a suffering puppy with big eyes and floppy ears: "If President Bush and the global public alike are unmoved by the slaughter of hundreds of thousands of fellow humans, maybe our last, best hope is that we can be galvanized by a puppy in distress."

The Collapse of Compassion

In recent years, vivid images of natural disasters in Southeast Asia, on the American Gulf Coast, and in Haiti and stories of individual victims there brought to us through relentless, courageous, and intimate news coverage unleashed an outpouring of compassion and humanitarian aid from all over the world. Perhaps there is hope here that vivid, personalized media coverage featuring victims of genocide could motivate intervention to prevent mass murder and genocide.

Perhaps. Research demonstrates that people are much more willing to aid identified individuals than unidentified or statistical victims (Jenni and Loewenstein, 1997; Kogut and Ritov, 2005a; Schelling, 1968; Small and Loewenstein, 2003, 2005). But a cautionary note comes from a study by Small, Loewenstein, and Slovic (2007), who gave people leaving a psychological experiment the opportunity to contribute up to \$5 of their earnings to Save the Children. In one condition, respondents were asked to donate money to feed an identified victim, a seven-year-old African girl named Rokia. They contributed more than twice the amount given by a second group asked to donate to the same organization working to save millions of Africans from hunger (fig. 7.6). Respondents in a



7.6. Mean donations. (Redrawn from Small et al., 2007)

third group were asked to donate to Rokia but were also shown the larger statistical problem (millions in need) shown to the second group. Unfortunately, coupling the statistical realities with Rokia's story significantly *reduced* the contributions to Rokia. It may be that the presence of statistics reduced the attention to Rokia essential for establishing the emotional connection necessary to motivate donations.

Alternatively, the recognition of the millions not being helped by one's donation may have produced negative affect that inhibited the response.

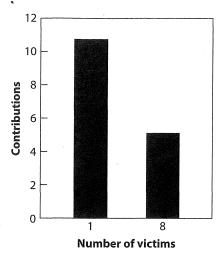
A follow-up experiment by Small, Loewenstein, and Slovic (2007) provided additional evidence for the importance of feelings. Before being given the opportunity to donate, participants were either primed to feel ("Describe your feelings when you hear the word baby," and similar items) or to do simple arithmetic calculations. Priming analytic thinking (calculation) reduced donations to the identifiable victim (Rokia) relative to the feeling prime. Yet the two primes had no distinct effect on statistical victims, which is symptomatic of the difficulty in generating feelings for such victims.

Annie Dillard read in her newspaper the headline "Head Spinning Numbers Cause Mind to Go Slack." She struggled to think straight about the great losses that the world ignores: "More than two million children die a year from diarrhea and eight hundred thousand from measles. Do we blink? Stalin starved seven million Ukrainians in one year, Pol Pot killed one million Cambodians." She writes of "compassion fatigue" and asks, "At what number do other individuals blur for me?" (Dillard, 1999, pp. 130–131).

An answer to Dillard's question is beginning to emerge from behavioral research. Studies by Hamilton and Sherman (1996) and Susskind et al. (1999) found that a single individual, unlike a group, is viewed as a psychologically coherent unit. This leads to more extensive processing of information and stronger impressions about individuals than about groups. Consistent with this, Kogut and Ritov (2005a, 2005b) found that people tend to feel more distress and compassion when considering an identified single victim than when considering a group of victims, even if identified.

Specifically, Kogut and Ritov asked participants to contribute to a costly lifesaving treatment needed by a sick child or a group of eight sick children. The target amount needed to save the child (children) was the same in both conditions. All contributions were actually donated to children in need of cancer treatment. In addition, participants rated their feelings of distress (feeling worried, upset, and sad) toward the sick child (children).

The mean contributions are shown in figure 7.7. Contributions to the individuals in the group, as in-

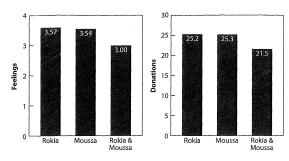


7.7. Mean contributions to individuals and their group. (Data from Kogut and Ritov, 2005b)

dividuals, were far greater than were contributions to the entire group. Ratings of distress were also higher in the individual condition. Kogut and Ritov concluded that the greater donations to the single victim most likely stem from the stronger emotions evoked by such victims.

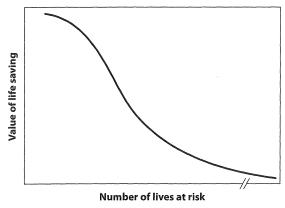
Västfjäll, Peters, and Slovic (2010) decided to test whether the effect found by Kogut and Ritov would occur as well for donations to two starving children. Following the protocol designed by Small, Loewenstein, and Slovic (2007), they gave one group of Swedish students the opportunity to contribute their earnings from another experiment to Save the Children to aid Rokia, whose plight was described as in the study by Small and coworkers. A second group was offered the opportunity to contribute their earnings to Save the Children to aid Moussa, a seven-yearold boy from Africa who was similarly described as in need of food aid. A third group was shown the vignettes and photos of Rokia and Moussa and was told that any donation would go to both of them, Rokia and Moussa. The donations were real and were sent to Save the Children. Participants also rated their feelings about donating on a scale of 1 (negative) to 5 (positive). Affect was found to be least positive in the combined condition, and donations were smaller in that condition (fig. 7.8). In the individual-child conditions, the size of the donation made was strongly correlated with rated feelings (r = .52 for Rokia; r =.52 for Moussa). However this correlation was much reduced (r = .19) in the combined condition.

As unsettling as is the valuation of lifesaving portrayed by the psychophysical model, the studies just described suggest an even more disturbing psychological tendency. Our capacity to feel is limited. To



7.8. Feelings and donations decline at N = 2! Mean affect ratings (left) and mean donations (right) for individuals and their combination.

(Adapted from Västfjäll et al., 2010)



7.9. A model depicting psychic numbing—the collapse of compassion—when valuing the saving of lives.

the extent that the valuation of lifesaving depends on feelings driven by attention or imagery, it might follow the function shown in figure 7.9, where the emotion or affective feeling is greatest at N = 1 but begins to decline at N = 2 and collapses at some higher value of N that becomes simply "a statistic." In other words, returning to Dillard's worry about compassion fatigue, perhaps the "blurring" of individuals begins at two! Whereas Lifton (1967) coined the term psychic numbing to describe the "turning off" of feeling that enabled rescue workers to function during the horrific aftermath of the Hiroshima bombing, figure 7.9 depicts a form of numbing that is not beneficial. Rather, it leads to apathy and inaction, consistent with what is seen repeatedly in response to mass murder and genocide.

The Failure of Moral Intuition

Thoughtful deliberation takes effort. Fortunately evolution has equipped us with sophisticated cognitive and perceptual mechanisms that can guide us through our daily lives efficiently with minimal need for "deep thinking." We have referred to these mechanisms as System 1.

Consider, for example, how we deal with risk. Long before we had invented probability theory, risk assessment, and decision analysis, there was intuition, instinct, and gut feeling, aided by experience, to tell us whether an animal was safe to approach or the water was safe to drink. As life became more complex and we gained more control over our environment, analytic ways of thinking, known as System 2, evolved to boost the rationality of our experiential reactions. Beyond the question of how water looks and tastes, we now look to toxicology and analytic chemistry to tell us whether the water is safe to drink (Slovic et al., 2004). But we can still use our feelings as well, an easier path.

As with risk, the natural and easy way to deal with moral issues is to rely on our intuitions: "How bad is it?" Well, how bad does it feel? We can also apply reason and logical analysis to determine right and wrong, as our legal system attempts to do. But moral intuition comes first and usually dominates moral judgment unless we make an effort to use judgment to critique and, if necessary, override our intuitive feelings (Haidt, 2001, 2007).

Unfortunately, moral intuition fails us in the face of genocide and other disasters that threaten human lives and the environment on a large scale. As powerful as System 1 is, when infused with vivid experiential stimulation (witness the moral outrage triggered by the photos of abuse at the Abu Ghraib prison in Iraq), it has a darker side. We cannot trust it. It depends upon attention and feelings that may be hard to arouse and sustain over time for large numbers of victims, not to speak of numbers as small as two. Left to its own devices, moral intuition will likely favor individual victims and sensational stories that are closer to home and easier to imagine. It will be distracted by images that produce strong, though erroneous, feelings, like percentages as opposed to actual numbers. Our sizable capacity to care for others may also be overridden by more pressing personal interests. Compassion for others has been characterized by Batson et al. (1983) as "a fragile flower, easily crushed by self concern" (p. 718). Faced with genocide and other mass tragedies, we cannot rely on our moral intuitions alone to guide us to act properly.

Philosophers such as Peter Singer (2007) and Peter Unger (1996), employing very different methods than psychologists, came to much the same conclusions about the unreliability of moral intuitions. Unger, after leading his readers through fifty ingenious thought experiments, urged them and us to think harder to overcome the morally questionable

appearances promoted by our intuitive responses. These intuitions, he argued, lead us to act in ways that are inconsistent with our true "Values," that is, the values we would hold after more careful deliberation: "Folks' intuitive moral responses to specific cases derive from sources far removed from our Values and, so, they fail to reflect these Values, often even pointing in the opposite direction" (p. 11).

Greene (2008), drawing on data from psychology and neuroscience as well as philosophy, attempted to explain the problems with intuitions in terms of the morally irrelevant evolutionary factors that shaped these intuitions. Thus we say it is wrong to abandon a drowning child in a shallow pond but okay to ignore the needs of millions of starving children abroad. The former pushes our emotional buttons whereas the latter do not. And this may be because we evolved in an environment in which we lived in small groups and developed immediate, emotionally based intuitive responses to the needs and transgressions of others. There was little or no interaction with faraway strangers.

Implications for International Law and Policy

Clearly there are many serious obstacles to consistent, meaningful intervention to prevent genocide and similarly grave abuses. In addition to the more obvious political, material, and logistical impediments, the international community must overcome the psychological constraints described here. Indeed, the cognitive limitations we identify make it much more difficult to mobilize global public sentiment in the way necessary to overcome the more obvious material and logistical constraints. The question is whether and how international law and institutions might be reformed to account for these cognitive limitations. In this section, we will canvass several implications of this research for the law and policy of atrocity prevention.

Although we have emphasized the implications of this research for the problem of genocide, much of the psychological research obviously applies to violations involving large numbers of victims in general. The data are not limited to genocide. The research provides insight into the ways in which individuals react to mass human rights abuses such as widespread arbitrary detentions and denial of a population's right to food. As a consequence, the lessons that are relevant to policy makers and practitioners relate broadly to the field of human rights.

Several of the following proposals are ambitious—especially those involving a change to the use-of-force regime—and that ambition raises questions about their political viability. But there are several factors

that may increase their viability. First, attempts to identify and reduce psychic numbing among electorates may produce a political opportunity for institutional change—that is, to the extent that psychic numbing exists and is masking a preference for antigenocide action, unmasking that preference may produce powerful political will. Second, political actors themselves may be more willing to embrace these various reforms if the changes are not intended to overcome political interests, but instead to overcome cognitive failures. The psychological research shows a collapse of rational calculation and evaluation that causes us to artificially devalue human life. Indeed, in some circumstances, the more widespread and systematic the violation, the weaker the reaction. At bottom, the need for reform should be grounded in an understanding that cognitive deficiencies can prevent actors from realizing a preference for stopping mass human rights violations—even when doing so would serve their overall values and interests.

Appreciation of the failure of moral intuition should inform the development of new legal rules and institutional arrangements concerned with atrocity prevention and human rights more generally. Indeed, it may only be laws and institutions that can keep us on course, forcing us to pursue the hard measures needed to combat massive human rights abuses when our attention strays and our feelings lull us into complacency. We accordingly propose several institutional designs to improve international decision making in this arena. We discuss several strategies (1) to insulate institutions from the effects of psychic numbing; (2) to remove or restrict institutional features that foster psychic numbing; (3) to promote System 2 deliberation directly; and (4) to employ System 1 to channel actors toward System 2 processes.

Insulate Institutions from the Effects of Psychic Numbing

One approach is to insulate decision-making processes from the adverse psychological effects that we have identified. For example, policy makers might design institutions to be less susceptible to psychic numbing or to operate despite the psychological effects on actors within the institution.

CONSTRUCT DEFAULT RULES AND PRECOMMITMENT DEVICES

The international regime could construct precommitment enforcement strategies to deal with genocide and other human rights atrocities of similar scale. Consider a few options: the UN Security Council could preauthorize, subject perhaps to an ex post

council override, the use of force in any situation in which atrocities reach a certain scale. Another possibility is that the Security Council could order (rather than authorize) all member states to take coercive action once the commission of atrocities reached a certain level. Alternatively, states could conclude a treaty in which state parties would preinvite foreign intervention and/or UN peacekeepers in the event that genocide occurs on their own territory.

Similarly, the psychological evidence provides a powerful reason for supporting the responsibility to protect, an emerging doctrine that shifts from a right of states to a duty of states to intervene in another country to stop an atrocity (Wheeler, 2005). The novelty of the responsibility to protect is that states are under an affirmative obligation—not just a license-to intervene once the Security Council has authorized such action. The psychological findings provide an independent and unique reason to place pressure on states in the form of this legal responsibility. The starting point should favor intervention (at the very least when the Security Council has determined force is appropriate).

Other precommitment strategies could be implemented to insulate institutions from the effects of psychic numbing with respect to human rights more generally. Aside from the use-of-force regime, multilateral organizations could preauthorize economic sanctions on the part of their member states. Nations could pass domestic legislation that triggers such sanctions or automatically increases foreign aid in the event of a humanitarian catastrophe (and could perhaps require repeal of such aid by a supermajority). States could preauthorize UN Special Rapporteurs to visit their country in the event of mass human rights violations. In all these instances, multilateral bodies, foreign countries, and the affected nation might be ill equipped—without the assistance of a precommitment device—to confront a situation after deaths and deprivations begin to mount.

Questions about whether and how to intervene in ongoing conflicts-militarily, economically, etc.-tend to occupy the field of the genocide-response debate, and one appealing feature of the psychic numbing literature is that it may offer a simple metric for determining when to intervene. Say, for example, that valuations of life begin to drop off significantly after 10 deaths. At 10 deaths, a preauthorized UN investigation would automatically be triggered (implementing new reporting methods, as discussed below); at 100 deaths, that investigatory body would immediately acquire certain authorities. These lockstep provisions can be justified on the grounds that any moresubjective metric raises the risk of psychic numbing. If such a system could be implemented, it could limit the

opportunity for genocidaire states to stall international intervention under the guise of diplomatic debate.

EMPHASIZE EARLY WARNING AND PREVENTIVE ACTION

Another approach is to act before psychic numbing sets in. Apart from the fact that prevention is in many ways easier, less costly, and less difficult than intervention (Hamburg, 2008), reaction strategies must necessarily overcome the psychic numbing generated by the instant crisis. This insight recommends a range of law and policy options including more vigorous international monitoring or intervention in situations likely to generate wide-scale atrocities (e.g., civil wars, military coups, etc.) or even "anticipatory" humanitarian intervention (Richter and Stanton, n.d.). It recommends establishing a general, preventive disclosure mechanism to preclude trafficking in resources that are at risk for funding human rights abuses, as a recent U.S. law attempts to do for conflict minerals in Congo. It also calls for greater financial and political support for criminal trials—if that instrument can be expected to deter future violations or to help halt cycles of violence. Prevention and reaction strategies need not be mutually exclusive. Early-warning systems could feasibly be triggered after low numbers of deaths, but such triggers need not be more than an investigatory panel to assess the risks of the current situation, both for future harm and also the risk of psychic numbing as the situation develops. That is, early-warning systems can emphasize both prevention and preparation—in this case preparation for numbing effects.

EMPOWER INSTITUTIONS AND ACTORS LESS LIKELY TO SUCCUMB TO PSYCHIC NUMBING

Psychological research also provides good reasons to support a form of subsidiarity within the humanitarian rights and use-of-force regime. Regional and local actors who are closer to the situation are more likely to overcome System 1 limitations in comprehending the gravity of an atrocity. Accordingly, international law might provide regional organizations (e.g., the Economic Community of West African States, the African Union) greater leeway to use force to stop genocide before or even without Security Council action. The objective here is to create a one-way ratchetproviding more proximate and local actors an option to intervene without complete international backing. The design would not work the other way; that is, to provide regional actors the authority to bar outside intervention by the international community.

Regional actors could also be empowered in intergovernmental settings involving enforcement measures

that do not entail the use of force. Examples of such enforcement measures include formal resolutions condemning a state for extremely poor human rights conditions, the creation of a special rapporteur to monitor the country, the ouster of a state from an intergovernmental organization, and the imposition of economic sanctions. Voting rules could be fashioned whereby such measures would be adopted either if a majority of state parties approves or if a supermajority of states from the relevant region approve. For example, the imposition of sanctions against Zimbabwe could be approved either (1) by a majority of all state parties to an international organization or (2) by approval of three-quarters of the African states even if a majority of the whole does not agree. Once again, these devices are intended to function as a one-way ratchet. Such a design principle would be important because of other political and psychological reasons that regional actors may otherwise protect their neighbors from enforcement actions.

Outside monitoring and independent international review are key components of the international regime. The foregoing discussion suggests that, in fact, outside reviewers may be more susceptible to numbing effects. Responding by empowering local actors to conduct investigations may not solve the numbing problem but may instead replace it with a neutrality problem if the local actors are less likely than their international counterparts to be impartial observers. One potential solution would be to turn to intermediate actors-regional bodies or hybrid localinternational bodies. Another would be to train, to the extent possible, the relevant rapporteurs to recognize and counter the risks of psychic numbing. But however the problem is addressed, institutional capacities must be assessed and-although it is not currently recognized as such—psychic numbing is a relevant factor to consider in making this assessment.

Remove or Restrict Institutional Features That Foster Psychic Numbing

CHANGE THE METHOD AND CONTENT OF HUMAN RIGHTS REPORTING

By challenging the assumption that information makes positive change more likely, the research presented in this chapter calls into question one of the strategic pillars of human rights advocacy. Documentation—including the presentation of data showing mass and systematic violations—is often thought to raise awareness. Efforts by international organizations to document mass human rights violations typically focus on the widespread nature of violations rather than on narratives or other information about the individuals

who have been harmed. Statistics prevail over stories. A good example of this is the Darfur Atrocities Documentation Project (Totten, 2006), which compiled a database of over 10,000 eye-witnessed incidents but reported mostly the percentages of different types of abuses.

International legal procedures amplify the problem. First, consider the strict page limitations that exist for reports to the UN Human Rights Council. These page constraints apply to reports by nongovernmental organizations as well as to those by UN human rights officials. As a result, the authors of the reports condense information into compact pieces of data and are unable to delve deeply into descriptions of individuals' lives. Under these pressures, statistics are also considered an efficient method for conveying information. Second, in official settings little opportunity exists for conveying information in the form of visual media. Third, important international legal forums impose either an expressed or implicit requirement that violations meet a quantitative threshold (UN Human Rights Council's 1503 Complaints Procedure), which incentivizes advocates to frame their appeal through the representation of large numbers of cases. It is not difficult to conceive of innovations to repair these problems. Procedural and substantive requirements could be softened or exceptions could be made to expand the forms of information conveyance.

RECONSIDER HUMAN RIGHTS INDICATORS

Many now call for the use of quantitative indicators in global governance (e.g., measures of good governance by the World Bank; see, e.g., Davis, Kingsbury, and Merry, 2010). The psychological research documented here suggests that significant perverse effects may result from the production, collection, and circulation of quantitative human rights indicators. Actors involved in these processes may become desensitized to human rights violations, and such processes often involve some of the most important actors within government and civil society. These effects may not be a sufficient basis to abandon or restrict indicators; however, in the emerging debate about their utility, these risks should be carefully considered.

Nevertheless, indicators can prove invaluable for monitoring and responding to psychic numbing. First, indicators can provide a valuable tool for tracking the likelihood of numbing effects—the larger the numbers involved, the greater the risks. Second, we can acknowledge the possibility that indicators might induce numbing without abandoning their use. Instead, we must be mindful of the difference between the collection of data and its final presented form. Data collection and data reporting could be done

by different agencies, and data collectors should be guarded against numbing effects and also trained to look for stories that can serve to illustrate the significance of a given atrocity.

RECONSIDER SUBSTANTIVE ELEMENTS OF HUMAN RIGHTS LAW

Even the substantive law of genocide might be considered problematic since it conceptualizes genocide as a collective or group injury rather than as harm to individuals. As a result of the legal definition, the discourse surrounding the presentation of grievances may focus too extensively on the group-based harms. In this light, it is instructive to reflect on the characterization by a Holocaust survivor, Abel Hertzberg: "There were not six million Jews murdered: there was one murder, six million times" (U.S. Holocaust Memorial Museum, 2005).

The definition of crimes against humanity raises a similar concern. Generally defined as a "widespread and systematic" attack against a civilian population, the elements of the crime might emphasize the representation of aggregate numbers rather than of individual cases. The particular definition of crimes against humanity in the UN Statute for the Rwanda Tribunal includes an unusual requirement: that the attack be directed against a "civilian population on national, political, ethnic, racial or religious grounds." That definition (which was altered in the treaty for the International Criminal Court) is subject to some of the same concerns as the group-based focus of genocide.

Employ System 1 to Activate and Support System 2 Processes

Despite the limitations of System 1 noted above, we should nevertheless attempt to bolster it, at least so it can motivate support for efforts based on System 2. Such attempts should capitalize on the findings described earlier demonstrating that we care most about aiding individual people in need, even more so when we can attach a name and a face to them.

AFFECTIVE IMAGERY

The data in this chapter present a striking irony: in an effort to emphasize objective facts, the human rights regime risks losing its ability to connect with sympathizers on a human level. To be sure, we do not advocate wholesale abandonment of current reporting mechanisms or the exclusive adoption of emotionladen stories. After all, the goal of overcoming psychic numbing is to better calibrate our interventions to the scale of the atrocities that we face. But there is ample room for the future of human rights reporting to exhibit mixed methodologies.

The increasing availability of mixed media may help in this regard. As people post visceral digital content depicting human rights abuses, audiences may exhibit responses that otherwise had been masked by numbing effects. In April 2010, the website Wikileaks posted video of U.S. soldiers firing indiscriminately upon civilians in Iraq, creating a media and political uproar. Dozens of news reports had already reported on the problem of indiscriminate targeting, none of which garnered the same attention as the online video. The same phenomenon can be said of the Abu Ghraib prisoner abuse scandal—during the entire U.S. occupation of Iraq, nothing created the same backlash as the release of the photos of prisoner mistreatment, despite several reports that, although less colorful, suggested much more violent and more widespread practices.

Thus, one possibility is to infuse human rights reporting with powerful affective imagery, such as that associated with Hurricane Katrina, the Southeast Asian tsunami, and the earthquake in Haiti. This would require pressure on the media to report the slaughter of innocent people aggressively and vividly. Another way to engage our experiential system would be to bring people from abused populations into our communities and our homes to tell their stories.

Above we discussed the disadvantages of reports that focus on the numbers of violations. While it is obviously necessary to document the scope of such atrocities, neglecting the stories of individuals certainly contributes to numbing. Human rights advocates should reorient the documentation and reporting of abuses to prompt System 1 thinking. In some cases, in-depth narratives and visual personal stories describing the predicament of individual victims should be emphasized instead of more abstract descriptions of the scale of abuses—that is, stories over statistics.

At the same time, scale and systematicity presumably remain important for calibrating the appropriate response to any human rights problem. As a consequence, human rights documentation should not abandon the reporting of scale and system-level effects. The central challenge of applying the psychological research to human rights advocacy is identifying when or how many "statistics" and when or how much "storytelling" should be employed in the documentation and reporting of abuses. Arresting visual displays (such as that shown in fig. 7.5) and photographs of victims and atrocities should be included in the reporting and in the publicly distributed

information presented by human rights advocates. Indeed, the future success of the human rights movement requires training not only advocates skilled in documenting large numbers of cases and professionals skilled in quantitative methods, but also professionals skilled in composing and representing narratives about the lives of individual victims. A good example of a policy report that was turned into a powerful narrative is the 9/11 Commission Report (National Commission on Terrorist Attacks Upon the United States, 2004), which was written by professional writers and published by a major publishing house, both of which contributed to its wide public consumption. Unique for a policy report, it was a best seller in 2004 and a finalist for the National Book Award.

On this last point, Paul Farmer (2005) wrote eloquently about the power of images, narratives, and first-person testimony to overcome our "failure of imagination" in contemplating the fate of distant, suffering people. Such documentation can, he asserted, render abstract struggles personal and help make human rights violations "real" to those unlikely to suffer them. But he is aware, as well, of the limitations of this information. He quoted Susan Sontag (2003), who cautioned that "as one can become habituated to harm in real life, one can become habituated to the harm of certain images" (p. 82). Sparking emotion with testimony and photographs, Farmer argued, is one thing; "linking them effectively, enduringly, to the broader project of promoting basic rights . . . is quite another" (p. 185). In short, he said, "serious social ills require in-depth analyses" (p. 185).

Further caveats about the use of atrocity images were expressed by Zelizer (1998), who argued that the recycling of images, such as photos of starving children in refugee camps, bears an eerie resemblance to photos from the Holocaust, which undermine their novelty and immediacy and can dull our responses. Similarly, Just (2008), reviewing the plethora of excellent books and movies on Darfur, observed that the horror they vividly depict should disgust us, but

one effect of the extraordinary amount of knowledge we have about Darfur is that these stories eventually run together and lose their power to shock. . . . Repetition eventually numbs the moral imagination. . . . It is a terrible thing to admit, but the more information we consume about Darfur, the less shocking each piece of new information seems. . . . Ignorance is not the only ally of indifference; sometimes knowledge, too, blunts the heart and the will. (p. 41)

Another serious concern is the distributional effects of information conveyance that relies on images, narratives, and storytelling. The types of individuals

and lifestyles that will trigger emotional connections may be implicitly affected by race, sexual orientation, gender, class, and the like. One must be especially concerned about a medium in which culturally disempowered groups often lose to more "compelling" stories of popular and culturally similar groups. Consider the case of Darfurees and the American news media. According to the Tyndall Report, which monitors American television coverage, ABC News allotted a total of 18 minutes on the Darfur genocide in its nightly newscasts in 2004, NBC had only 5 minutes, and CBS only 3 minutes. Martha Stewart received vastly greater coverage, as did Natalee Holloway, the American girl missing in Aruba.

VICTIM EMPOWERMENT

Another domain is victim empowerment. Where System 2 processes are systematically lacking, victims could be empowered to trigger a range of institutional responses such as initiating international court proceedings, placing an issue on the agenda of an international political body, or making a presentation as part of the deliberative process. Human rights organizations, including the UN Office of the High Commissioner for Human Rights, could personally involve victims in making such presentations or reading their organization's statement before such bodies. In the abstract, such measures risk biasing decision makers toward System 1 emotional responses, which would be inappropriate in certain decision-making forums. Regime designers would need to consider the conditions for crafting such interventions primarily to prod System 2 mechanisms into action when they are otherwise deficient.

Directly Promote System 2 Deliberation

Even when System 1's moral intuitions are distorted, human cognition can rely on the rational, deliberative mode of thinking characteristic of System 2. Where emotion and affect let us down, we still can be spurred into action if we can trigger a deliberative process capable of weighing the costs and benefits of possible intervention options. In short, institutional design should focus on ways to directly engage System 2 in the consideration of mass human rights violations.

The role of psychology in mediating our reactions to genocide may suggest the promise of a supplemental remedy, one that, paradoxically, is actually quite modest on its face—a "less is more" approach to the international legal regime combating genocide. Rather than solely focusing on obligations to act, international and domestic law should also require actors to deliberate and reason about actions to take in response

to genocide, thereby engaging System 2 cognition in order to overcome psychic numbing. The obligation to deliberate should apply to omissions (e.g., the failure to respond meaningfully to a genocide) as well as to acts. Psychological research indicates that this simple act of reasoned decision making may help overcome cognitive obstacles to intervention.

Can legal institutions in fact promote deliberation, either among policy makers or among the general public? Although the law is typically conceived as being concerned with action and not deliberation, institutional designers have taken just such an approach in a number of areas of law and policy, seeking to promote better outcomes not just by regulating the end result of the decision-making process but by regulating the process itself as well. One important example is the legal requirement in many countries that governmental agencies produce environmental impact statements before taking actions that might have deleterious environmental effects. These procedural requirements are often self-consciously deliberation-forcing mechanisms: they do not bar agency action that would harm the environment; they simply require that these effects be considered. And while the success of such laws in actually altering outcomes has been debated, advocates for the environment have at least taken them seriously enough to push for enforcement of such requirements in the courts, even without a guarantee that the ultimate policy decision will be affected.

A more broadly applicable example from U.S. administrative law is the requirement that cost-benefit analysis be performed in the course of deciding whether to regulate or to not regulate. While costbenefit analysis was initially considered a means for achieving deregulatory results, recent developments in the administrative state have illustrated the analysis's potential for promoting the consideration of beneficial regulations (Hahn and Sunstein, 2002). Applied without a deregulatory bias, this policy might be viewed as a deliberation-forcing rule to insure that the government does not fail to consider potential welfare-promoting actions. Consider another example of deliberation-forcing devices in legislative affairs. In the landmark case Doctors for Life International (2006), the South African Constitutional Court enforced a constitutional provision requiring participatory democracy by ordering the legislature to hold public hearings and debates. The court drew inspiration from similar constitutional requirements in other countries. All of these examples demonstrate a concern with the quality of deliberation given to controversial government decisions and manifest an expectation that improved deliberation can result in improved decisions, even without mandating what the final decision itself must be.

These examples indicate that pursuing a deliberation-forcing approach to antigenocide efforts would not be unprecedented as a supplemental legal tool designed to overcome the cognitive obstacles in the way of interventions. Moreover, because it requires "only" deliberation, states may be more willing to take on such obligations. At the international level, an additional protocol to the Genocide Convention could compel states to respond to genocide by producing a detailed action plan, factoring in the likely costs and benefits of different types of intervention. At regular intervals, states could be required to justify their failure to act based on an updated assessment of costs and benefits. And the treaty could require highvisibility public presentation of these findings before both international and domestic audiences. The reporting requirements could also specify engagement at both the elite decision-making level (e.g., requiring the participation of the security establishment) and involvement at the popular level (e.g., requiring dissemination of information and hearings designed to reach the public). In addition, the UN Security Council could create a genocide committee to monitor and receive state reports and to ensure that state reports are timely and do not constitute foot-dragging. Such a committee would be analogous to the 1540 Committee, which was established to monitor and coordinate national nonproliferation efforts. Finally, at the national level, legislatures and executives can require hearings and reports evaluating the costs and benefits of intervention and nonintervention. The important point is that a procedural obligation to deliberate may be less onerous but more likely to yield meaningful substantive responses in the advent of genocide.

Conclusion

Drawing upon behavioral research and common observation, we argue here that we cannot depend only upon our moral intuitions to motivate us to take proper action against genocide and mass abuse of human rights. This analysis places the burden of response squarely upon moral argument and international law. The genocide convention was supposed to meet this need, but it has not been effective. It is time to reexamine this failure in light of the psychological deficiencies described here and design legal and institutional mechanisms that will compel us to respond to genocide and other mass harms with a degree of intensity that is commensurate with the high value we place on individual human lives.

The stakes are high. Failure to overcome psychic numbing may condemn us to witness another century of genocide and mass abuses of innocent people.

Notes

Portions of this chapter appeared earlier in the paper "If I Look at the Mass I Shall Never Act: Psychic Numbing and Genocide," which was published in Judgment and Decision Making (2007, 2, 79-95). We wish to thank the William and Flora Hewlett Foundation and its president, Paul Brest, for support and encouragement in the research that has gone into this chapter. Additional support has been provided by the National Science Foundation through Grants SES-0649509 and SES-1024808. Many individuals have provided constructive criticisms and helpful suggestions on this work as well as other intellectual and logistical support. Among the many, Ellen Peters and Daniel Västfjäll deserve special thanks. Finally, this chapter has benefited greatly from the advice and comments of Dan Ariely and Cass Sunstein. David Zionts currently serves as Special Advisor to the Legal Adviser, U.S. Department of State. The views expressed here are his own and do not necessarily reflect those of the U.S. Department of State or the U.S. Government.

References

- Associated Press. (1994, September 21). 38,000 shoes stand for loss in lethal year. *Register-Guard* (Eugene, OR), pp. 6A.
- Baron, J. (1997). Confusion of relative and absolute risk in valuation. *Journal of Risk and Uncertainty*, 14, 301–309.
- Barrett, L. F., and Salovey, P. (Eds.) (2002). The wisdom in feeling. New York: Guildford.
- Bartels, D. M., and Burnett, R. C. (2006). Proportion dominance and mental representation: Construal of resources affects sensitivity to relative risk reduction. Unpublished manuscript. Northwestern University, Evanston, IL.
- Batson, C. D. (1990). How social an animal? The human capacity for caring. *American Psychologist*, 45, 336–346.
- Batson, C. D., O'Quin, K., Fultz, J., Vanderplas, M., and Isen, A. (1983). Self-reported distress and empathy and egoistic versus altruistic motivation for helping. *Journal of Personality and Social Psychology*, 45, 706–718.
- Clark, M. S., and Fiske, S. T. (Eds.) (1982). Affect and cognition. Hillsdale, NJ: Erlbaum.
- Coke, J. S., Batson, C. D., and McDavis, K. (1978). Empathic mediation of helping: A two-stage model. *Journal of Personality and Social Psychology*, 36, 752–766.
- Dallaire, R. (2005). Shake hands with the devil: The failure of humanity in Rwanda. New York: Carrol and Graf.
- Davis, K. E., Kingsbury, B., and Merry, S. E. (2010). *Indicators as a technology of global governance* (Report No. 2010/2). Retrieved from Institute for Interna-

- tional Law and Justice website: http://www.iilj.org/publications/2010-2.Davis-Kingsbury-Merry.asp
- Dehaene, S. (1997). The number sense: How the mind creates mathematics. New York: Oxford University Press.
- Dickert, S., and Slovic, P. (2009). Attentional mechanisms in the generation of sympathy. *Judgment and Decision Making*, 4, 297–306.
- Dillard, A. (1999). For the time being. New York: Alfred A. Knopf.
- Doctors for Life International v. Speaker of the National Assembly and Others, 12 BCLR 1399 (2006).
- Eisenberg, N., and Miller, P. (1987). Empathy and prosocial behavior. *Psychological Bulletin*, 101, 91–119.
- Epstein, S. (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist*, 49(8), 709–724.
- Farmer, P. (2005, March). Never again? Reflections on human values and human rights. *The Tanner Lectures on Human Values*. Salt Lake City: University of Utah. Retrieved from http://www.tannerlectures.utah.edu/lectures/documents/Farmer_2006.pdf
- Fechner, G. T. (1912). Elements of psychophysics. *Classics in the history of psychology*. Retrieved from http://psychclassics.yorku.ca/Fechner/ (Original work published 1860)
- Fetherstonhaugh, D., Slovic, P., Johnson, S. M., and Friedrich, J. (1997). Insensitivity to the value of human life: A study of psychophysical numbing. *Journal of Risk and Uncertainty*, 14(3), 283–300.
- Forgas, J. P. (Ed.) (2000). Feeling and thinking: The role of affect in social cognition. Cambridge: Cambridge University Press.
- Friedrich, J., Barnes, P., Chapin, K., Dawson, I., Garst, V., and Kerr, D. (1999). Psychophysical numbing: When lives are valued less as the lives at risk increase. *Journal* of Consumer Psychology, 8, 277–299.
- Galanter, E. (1962). The direct measurement of utility and subjective probability. American Journal of Psychology, 75, 208–220.
- Glover, J. (2001). Humanity: A moral history of the twentieth century. New Haven, CT: Yale University Press.
- Greene, J. D. (2008). The secret joke of Kant's soul. In W. Sinnott-Armstrong (Ed.), *The neuroscience of morality: Emotion, brain disorders, and development* (Vol. 3, pp. 35–79). Cambridge, MA: MIT Press.
- Hahn, R., and Sunstein, C. (2002). A new executive order for improving federal regulation? Deeper and wider cost-benefit analysis. *University of Pennsylvania Law Review*, 150, 1489–1552.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. Psychological Review, 108(4), 814–834.
- ——. (2007). The new synthesis in moral psychology. *Science*, *316*, 998–1002.
- Hamburg, D. A. (2008). Preventing genocide: Practical

- steps toward early detection and effective action. Boulder, CO: Paradigm.
- Hamilton, D. L., and Sherman, S. J. (1996). Perceiving persons and groups. Psychological Review, 103(2), 336-355.
- Jenni, K. E., and Loewenstein, G. (1997). Explaining the "identifiable victim effect." Journal of Risk and Uncertainty, 14, 235-257.
- Just, R. (2008, August 27). The truth will not set you free: Everything we know about Darfur, and everything we're not doing about it. New Republic, pp. 36-47.
- Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. American Psychologist, 58, 697-720.
- Kahneman, D., and Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, and D. Kahneman (Eds.). Heuristics and biases (pp. 49-81). Cambridge: Cambridge University Press.
- Kahneman, D., and Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47, 263-291.
- Kogut, T., and Ritov, I. (2005a). The "identified victim" effect: An identified group, or just a single individual? Journal of Behavioral Decision Making, 18, 157-167.
- -. (2005b). The singularity of identified victims in separate and joint evaluations. Organizational Behavior and Human Decision Processes, 97, 106-116.
- Kristof, N. D. (2007, May 10). Save the Darfur puppy. New York Times. Retrieved from http://select.nytimes .com/2007/05/10/opinion/10kr istof.html
- Le Doux, J. (1996). The emotional brain. New York: Simon and Schuster.
- Lifton, R. J. (1967). Death in life: Survivors of Hiroshima. New York: Random House.
- Loewenstein, G., Weber, E. U., Hsee, C. K., and Welch, E. S. (2001). Risk as feelings. Psychological Bulletin, 127, 267-286.
- Mowrer, O. H. (1960). Learning theory and behavior. New York: John Wiley and Sons.
- National Commission on Terrorist Attacks Upon the United States. (2004). The 9/11 Commission Report. Retrieved from http://www.9-11commission.gov/
- Richter, E., and Stanton, G. (n.d.). The precautionary principle: A brief for the Genocide Prevention Task Force. Retrieved from http://www.genocidewatch.org/ resources/bydrgreg orystanton.html
- Schelling, T. C. (1968). The life you save may be your own. In S. B. Chase, Jr. (Ed.), Problems in public expenditure analysis (pp. 127-176). Washington, DC: Brookings Institution.
- Schroeder, P., and Schroeder-Hildebrand, D. (2004). Six million paper clips: The making of a children's holocaust museum. Minneapolis: Kar-Ben Publishing.
- Singer, P. (2007, March). Should we trust our moral intu-

- itions? Project Syndicate. Retrieved from http://www .utilitarian.net/singer/by/200703--.htm
- Slovic, P., Finucane, M. L., Peters, E., and MacGregor, D. G. (2002). The affect heuristic. In T. Gilovich, D. Griffin, and D. Kahneman (Eds.), Heuristics and biases: The psychology of intuitive judgment (pp. 397-420). New York: Cambridge University Press.
- -. (2004). Risk as analysis and risk as feelings: Some thoughts about affect, reason, risk, and rationality. Risk Analysis, 24, 1-12.
- Slovic, S., and Slovic, P. (2004). Numbers and nerves: Toward an affective apprehension of environmental risk. Whole Terrain, 13, 14-18.
- Small, D. A., and Loewenstein, G. (2003). Helping a victim or helping the victim: Altruism and identifiability. Journal of Risk and Uncertainty, 26, 5-16.
- -. (2005). The devil you know: The effects of identifiability on punishment. Journal of Behavioral Decision Making, 18, 311-318.
- Small, D. A., Loewenstein, G., and Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. Organizational Behavior and Human Decision Processes, 102, 143-153.
- Sontag, S. (2003). Regarding the pain of others. New York: Farrar, Straus and Giroux.
- Stanovich, K. E., and West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? Behavioral and Brain Sciences, 23, 645-726.
- Stevens, S. S. (1975). Psychophysics. New York: Wiley.
- Susskind, J., Maurer, K., Thakkar, V., Hamilton, D. L. and Sherman, J. W. (1999). Perceiving individuals and groups: Expectancies, dispositional inferences, and causal attributions. Journal of Personality and Social Psychology, 76(2), 181-191.
- Tomkins, S. S. (1962). Affect, imagery, and consciousness: Vol. 1. The positive affects. New York: Springer.
- (1963). Affect, imagery, and consciousness: Vol. 2. The negative affects. New York: Springer.
- Totten, S. (Ed.). (2006). Genocide in Darfur: Investigating the atrocities in the Sudan. New York: Routledge.
- Ubel, P. A., Baron, J., and Asch, D. A. (2001). Preference for equity as a framing effect. Medical Decision Making, 21, 180-189.
- Unger, P. (1996). Living high and letting die: Our illusion of innocence. New York: Oxford University Press.
- U. S. Holocaust Memorial Museum. (2005). Life after the Holocaust: Thomas Buergenthal—Personal history. Retrieved from http://www.ushmm.org/wlc/en/ media_oi.php?ModuleId=10007192&MediaId=5603
- Van Berkum, J.J.A., Holleman, B., Nieuwland, M., Otten, M., and Murre, J. (2009). Right or wrong? The brain's fast response to morally objectionable statements. Psychological Science, 20, 1092-1099. doi: 10.1111/j.1467-9280.2009.02411.x

- Västfjäll, D., Peters, E., and Slovic, P. (2010). Compassion fatigue: Donations and affect are greatest for a single child in need. Manuscript in preparation.
- Vedantam, S. (2010). The hidden brain: How our unconscious minds elect presidents, control markets, wage wars, and save our lives. New York: Spiegel and Grau.
- von Lang, J. (Ed.). (1983). Eichmann interrogated: Transcripts from the archives of the Israeli police. New York: Farrar, Straus and Giroux.
- Weber, E. H. (1834). De pulsu, resorptione, auditu et tactu. Leipzig: Koehler.
- Wheeler, N. J. (2005). A victory for common humanity? The responsibility to protect and the 2005 World Summit. *Journal of International Law and International Relations*, 2, 95–105.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. American Psychologist, 35, 151–175.
- Zelizer, B. (1998). Remembering to forget: Holocaust memory through the camera's eye. Chicago: University of Chicago Press.